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MANUFACTURERS RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S Patent Office.

VOL. LIX. No. 4. WEEKLY. | BALTIMORE, FEBRUARY 2, 1911 | $4.00 A YEAR. SINGLE COPIES, 15 CENTS.

Manufacturers Record.

PUBLISHED EVERY THURSDAY BY THE MANUFACTURERS RECORD PUBLISHING CO. BALTIMORE.

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New York—52 Broadway.
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St. Louis—543 Century Building.

Subscription, - - - - - - - - - - $4 a year (payable in advance) to United States, Mexico, Cuba, Porto Rico, Hawaii and the Philippines.
To Foreign Countries (including Canada) in the Postal Union, $6.50 a year.

[Entered at the Baltimore Postoffice as second-class matter.]

BALTIMORE, FEBRUARY 2, 1911.

SHADOWS A-PLENTY.

The Washington (D. C.) ground-hog doesn't have to leave his hole to cast shadows. He doesn't want to. He has been well fed recently.

FINANCE AND PHILANTHROPY.

May not the recently-noted reduction of deposits in New York banks to the extent of $158,000,000 be connected in some way with the activities at this time of great "philanthropies" domiciled in that city?

RAILROAD CONFIDENCE SHOWN IN PLANS TO SPEND $75,000,000.

Announcement comes from New York of one of the greatest steps ever taken by boards of directors in the history of American railroads. As an expression of confidence in the future, it is almost without parallel. It is that the directors of the Harriman lines have definitely decided upon the expenditure of $75,000,000 to double-track the Union Pacific and Southern Pacific line (it is composed of parts of the two properties) all the way through from the Missouri River to San Francisco; also the line from Granger, Wyo., to Huntington, Ore., and along the Columbia River to Portland. This will mean building second track on nearly 1700 miles of line, for the line from Omaha west has been laying second track for several years, and by July 1 next will have 630 miles of double track. The huge sum to be invested will be disbursed during a period of five years.

A statement was issued by the companies, saying that experience during the last two years had demonstrated that a double track will soon be necessary, if it is not now, to handle the business. The entire country served by the lines is developing rapidly (it is only in its infancy), and, although the outlook is in many ways unsatisfactory, the companies feel that in the long run the people are going to treat railroad investments just as they treat all other investments for the development of that section concerned. If the lines wait until all difficulties are removed, they will probably fall behind instead of doing their share in the development. Of course, if unfavorable conditions become permanent, investors should not be asked to provide money to continue the work, but the companies do not anticipate that.

Plans for the construction of a number of extensions and new lines tributary to the Union and Southern Pacific roads were also approved at the directors' meetings which decided upon the big expenditure on double-tracking.

It is said that in the financial district of New York the action of the Harriman companies was regarded as epoch-making, being a radical departure from the position taken by most of the railroads, which are declining to do anything which can be deferred until the conditions to which the railroads object are removed. The Southern Pacific lines are over 10,000 miles long, and those of the Union Pacific about 6500 miles long.

SOUTHERN PIG IRON.

The United States made a record in pig-iron production last year—27,298,545 tons. That was an increase of 1,503,074 tons over the production of 1909. While the South's 1910 production, 3,393,801 tons, was an increase of 277,624 tons over 1909, it lacked 51,420 tons of equaling the Southern production of 1907. Comparison of the past four years is made in the following table:

States.	1907.	1908.	1909.	1910.
Ala.....	1,686,674	1,397,014	1,763,617	1,939,147
*Ga.....	55,825	24,345	26,072	10,725
Ky.....	127,946	45,096	86,371	100,500
Md.....	411,873	183,572	286,856	326,214
Tenn.....	733,106	290,826	333,845	397,569
Va.....	478,771	320,458	391,134	444,976
W. Va....	291,066	65,551	228,282	174,661
Total..	3,445,221	2,326,792	3,116,177	3,393,801
U. S.....	25,781,361	15,936,018	25,795,471	27,298,545

*Includes Texas.

MISSOURI.

Missouri is one of the great States of the country in which a comparatively slight increase in population in the past ten years has been accompanied by marked increase in the value of farm property. In last week's issue of the MANUFACTURERS RECORD it was shown that for twelve States in different parts of the country, there was an increase of 90 per cent. in the aggregate value of farm lands and buildings. Those twelve States included neither Missouri, whose population increased in the past ten years at the rate of 6 per cent. to 3,293,335, nor Pennsylvania, whose population increased at the rate of 21.6 per cent. to 7,665,111. Comparison of these two States in 1900 and 1910 brings out some interesting facts:

Pennsylvania.

	1900.	1910.	Inc. P. C.
Population.....	6,302,115	7,665,111	21.6
Farm acreage....	19,371,000	18,556,000	*4.
Improved acreage.....	13,209,000	12,660,000	*4.
Value, land and buildings.....	$898,273,000	$1,035,300,000	15.
Acre value, land and buildings..	$46.37	$55.79	20.

*Decrease.

Missouri.

	1900.	1910.	Inc. P. C.
Population.....	3,106,665	3,293,335	6.
Farm acreage....	33,998,000	34,516,000	2.
Improved acreage.....	22,900,000	24,528,000	7.
Value, land and buildings.....	$843,979,000	$1,710,505,000	103.
Acre value, land and buildings..	$24.82	$49.56	100.

As bearing directly upon the value of farm lands, it should be noted that within the land area of Pennsylvania, 44,832 square miles, are at least ten cities having a population greater than 50,000, while within the area of Missouri, 68,727 square miles, there are but three cities each having a population greater than 50,000, and that the population of Philadelphia alone is equal to 47 per cent. of the total population of the State of Missouri. Yet, with a decrease both in total farm acreage and in improved acreage, the value of farm lands and buildings in Pennsylvania increased in the ten years from $898,273,000 to $1,035,300,000, or at the rate of 15 per cent., while with an increase both in farm acreage and improved acreage, the value of farm land and buildings in Missouri increased from $843,979,000 to $1,710,505,000, or at the rate of 103 per cent., and the average acre value of land and buildings increased at the rate of 100 per cent. to $49.56, or within 86.23 of the average acre value in Pennsylvania in 1910.

One great influence in the increase in the value of farm properties in Missouri is the increasing value of its agricultural products. In 1909 it yielded 197,714,946 bushels of corn, valued at $114,844,044; 27,502,879 bushels of wheat, valued at $29,608,414, and 18,808,576 bushels of oats, valued at $7,500,794, besides $37,796,111 worth of hay and forage, $7,087,500 miscellaneous vegetables, $3,961,404 potatoes, $3,229,001 cotton, $823,081 sorghum syrup, $1,383,473 prairie hay, $1,001,600 kaffir corn, millet, cowpeas, castor beans, etc., with flax, rye, buckwheat, barley, broom corn, tobacco, sorghum seed, clover seed and timothy seed bringing the total for farm crops to $209,219,478. Livestock sent to market brought $136,250,858; wool, $1,654,042; eggs, $22,309,507; dressed poultry, $22,914,913, and feathers, $678,235, a total for poultry products of $45,902,655, a total for these products of $393,000,000. These figures are derived from the exceedingly interesting and valuable publication of the Missouri Bureau of Labor Statistics, Commissioner J. C. A. Hiller, known as the "Red Book," and giving in detail the surplus products of Missouri counties. In that publication the production of the State, excluding manufactured goods, save forest products, is estimated at $530,456,579, in 1909, and the values by classes of the products that were sold are as follows:

Commodity.	Value.
Live stock.....	$136,250,858
Farmyard products.....	45,902,655
Farm crops.....	38,462,756
Mines and quarries.....	31,367,173
Forest products.....	23,841,357
Mill products.....	16,827,799
Dairy products.....	14,570,925
Fresh fruit.....	6,563,635
Vegetable and canned.....	5,673,253
Stone and clays.....	3,545,393
Cotton products.....	4,094,161
Packing-house.....	3,880,376
Liquid products.....	1,934,194
Nursery products.....	1,570,547
Wool and mohair.....	1,424,093
Corncob products.....	448,454
Fish and game.....	716,053
Apiary and cane.....	162,139
Medicinal products.....	93,665
Unclassified.....	5,273,531
Total.....	$342,542,968

It is no wonder that Missouri is described as the land of opportunities and boundless resources, and one of the surest means of attracting attention to these opportunities in thousands of acres of rich reclaimed bottom lands and extensive stretches of fertile lands, in the expanding acreage in apples and other fruit and in timber and mineral resources, is this publication of the Bureau of Labor Statistics.

RECIPROCITY, BUT—?

They were talking of revising the tariff, piecemeal, by schedule.

Diversion was offered, too, in a planned permanent tariff commission.

The reciprocity agreement with Canada was laid before Congress with splendid chances for schedules for piecemeal consideration.

Poof!

Elder Statesmen and Younger Statesmen frankly admitted their belief in the theory of reciprocity.

But—

It all depends who is to be reci and who procus.

Northwestern farmers, believing in great faith that ought to remove mountains, that free lumber, instead of lumber with a duty of $1.25 a thousand feet, would mean cheaper lumber for them, favor, of course, free lumber in the reciprocity agreement. But they just naturally do abhor free cattle, free hogs, free sheep, free poultry, free grain, free hay, free potatoes, free cabbages and free other things to eat. They have those things to sell. They have to buy lumber.

On the other hand, New England, as a whole, would be inclined to favor these free foodstuffs. But when it comes to fish, and especially cod, the Gloucester fishermen display their flags at half-mast with the union down.

Newspapers and other publications, under an impression that free wood pulp and free print paper would mean cheaper paper, favor such free items in the reciprocity. But how many of the newspapers consider the possibilities in ownership or control of wood pulp sources by the controllers of paper prices in this country.

So, too, advocates of free "raw ma-

terials," under the impression that thereby goods manufactured of such materials will be cheaper, will hail with joy whatever reduction or abolition of duty they may discover in the four schedules of the reciprocity agreement.

After all, the farmers of the country are the ones who at present and on the surface of things seem to be the ones selected to hold the bag in connection with this very skilfully-devised reciprocity agreement. But their apprehensions on that score are in spite of the Presidential suggestion:

> I do not wish to hold out the prospect that the unrestricted interchange of food products will greatly and at once reduce their cost to the people of this country.

To be sure, to be sure. But that view hardly harmonizes with the view of Director of the Mint George E. Roberts, described as coming to the aid of the administration with an expression as to reciprocity containing the following:

> I believe it would be greatly to the advantage of the Republican party to have the cost of food eliminated from political discussions. I do not think the high cost of food in recent years has been due in any important degree to the operations of the tariff. But it has been so charged; the Republican party has borne the onus. It will be immensely beneficial to the Republican party to have that factor eliminated from the next Presidential campaign.

There is common sense in the suggestion that the high cost of food in recent years has not been due in any important degree to the operation of the tariff. But how does Mr. Roberts imagine that the discussion of the "high cost of living" is to be eliminated from politics, if President Taft declares his unwillingness to hold out the prospect that free trade in food products between Canada and the United States will greatly and at once reduce their cost to the people of this country?

Going a step farther, is there willingness on the part of anyone concerned in the concoction of this reciprocity agreement to give assurance that the free interchange of other materials between Canada and the United States, even including cotton oil, appealing to a class of statesmen who might thereby forget the importance of the lumber interests, will greatly and at once reduce the cost of goods manufactured from such materials to the people of this country?

Mr. James J. Hill discovers in the proposed agreement "a measure of true statesmanship mainly opposed by the demagogue." Provided Mr. Hill has been quoted correctly, his enthusiasm should be read in connection with another statement of Mr. George E. Roberts:

> If our railroads can get into the Canadian Northwest and participate in the haul of wheat from that territory to the seaboard, they will benefit by the treaty, employ more labor, and that will be to the general benefit of the farmers as well as everyone else.
>
> If it promotes the growth of our cities, such as Des Moines, St. Paul, Minneapolis and Chicago, there are certain to be incidental benefits to the farmers.

Happy farmers! Happy everyone else! So, too, if we can get free lumber, free coal, free iron ore and other free materials, railroads operating between Canada and the United States will benefit, and benefit, perhaps, much more than the interests in the United States controlling mineral and timber resources in Canada. But what assurance is there that such mutual benefits will be for the benefit of producers in this country of coal, iron ore, lumber, etc., or even of the people of the United States and the people of Canada?

How do they know that the agreement may not be the means of concentrating in the hands of a few the resources of materials for industry in both countries or of promoting farther-reaching ambitions of like kind?

The people of this country should not, under an impression having a basis only in theory that the Canadian reciprocity agreement is going to settle the problem of the "high cost of living," permit the reciprocity agreement to go through Congress under any pressure without the fullest and freest scrutiny. The question is greater than that of the success of this party or that in politics. Reciprocity should never be allowed to sacrifice many interests of the United States for the benefit of a few interests. On its face the proposed agreement with Canada is as full of delicate situations as the Payne-Aldrich tariff.

A CLEARING-HOUSE OF INFORMATION FOR ADVERTISERS.

Illustrative of the recognition of the wide and varied opportunities for publicity in the advertising pages of the MANUFACTURERS RECORD is the character of seventeen advertisements received in one mail on January 30 for insertion in this week's issue. Display advertisements included mention of relaying rails wanted by a Virginia lumber company and railroad equipment for sale in Texas; capital wanted in Mississippi; stock, machinery and plant for sale by a pump company in New York; ice plants for sale in Kansas; ice machines for sale in Missouri, and knitting mill equipment for sale in Florida. Proposals advertisements were for water-works and electric-light plant in Georgia, and for reinforcing bars for the Isthmian Canal Commission. Among the classified advertisements were 120 acres of farm land for sale in Louisiana, and 320 acres in Illinois; several hundreds dollars to invest in South Carolina; city property for rent in Texas; lumber mill for sale in Virginia; fertilizer and ice plant for sale in Florida, and 65,000 acres of timber land for sale in the same State, and a foreman and two apprentices wanted for a cabinet and frame department in a Florida establishment. These seventeen advertisements received in one mail are typical of the thousands of short-time advertisements published in the course of a year in the MANUFACTURERS RECORD. They not only indicate some of the many classes of readers of the MANUFACTURERS RECORD who find in its advertising pages information as interesting as that which is published in its news columns and suggest the proper policy to be pursued profitably by others wishing to sell or wishing to buy, but also reflect to a certain degree the many activities centering in the development of the South and the interest in that section and elsewhere in the country in such activities.

The extent of these activities is revealed in the fact that during 1910 the Construction Department of the MANUFACTURERS RECORD, devoted to prompt news of Southern industrial and other developmental undertakings, published 49,705 items dealing with the establishment or progress of new and enlarging industrial, railroad, commercial, municipal and general business developments and building operations in the Southern and Southwestern States. A summary of these items was statistically presented in our issue of January 5. The items in our Construction Department during the month of January are herewith summarized.

During the month of January the Construction Department of the MANUFACTURERS RECORD published 3814 items relative to industrial, railroad, building and other general business interests of the South and Southwest. These items have tersely described various new developments, from the opening of land propositions and railroad construction to the establishment of mills, factories and other plants. Mention has been made of further equipment for many developments already in operation. The erection of public and private buildings has been noted. The accompanying table gives these items in a concise statement:

Synopsis of Construction Department, MANUFACTURERS RECORD, *for the month of January,* 1911.

Total of items to February 1		3814
Construction	3158	
Machinery, Proposals and Supplies Wanted	457	
Burned, etc.	199	
Divided in detail as follows:		
Bridges, Culverts, Viaducts		70
Canning and Packing Plants		19
Clayworking Plants		21
Coal Mines and Coke Ovens		67
Concrete and Cement Plants		8
Cotton Compresses and Gins		19
Cottonseed-oil Mills		8
Drainage and Irrigation		25
Electric-light and Power		86
Fertilizer Factories		18
Flour, Feed and Meal Mills		29
Foundry and Machine Plants		61
Gas and Oil Developments		30
Ice and Cold-storage Plants		38
Iron and Steel Plants		6
Land Developments		92
Lumber Manufacturing		32
Metal-working Plants		17
Mining		43
Miscellaneous Construction		38
Miscellaneous Enterprises		195
Miscellaneous Factories		236
Railway Shops, Terminals, Roundhouses, Sheds, etc.		7
Road and Street Work		135
Sewer Construction		72
Telephone Systems		42
Textile Mills		33
Water-works		112
Woodworking Plants		73
Railways.		
Steam		188
Street		25
Buildings.		
Apartment-houses		42
Association and Fraternal		42
Bank and Office		70
Churches		98
City and County		60
Courthouses		21
Dwellings		299
Government and State		22
Hotels		79
Miscellaneous		71
Railway Stations		32
Schools		142
Stores		183
Theaters		15
Warehouses		46
Burned, etc.		199
Machinery, Proposals and Supplies Wanted		457
Total		3814

The Machinery, Proposals and Supplies Wanted list contains 12 foreign wants from interested parties in Cuba, Mexico, England, Holland, Germany, Turkey and Egypt.

RICE IN ARKANSAS.

In 1899 Arkansas raised less than 200 bushels of rice—an amount hardly to be considered in the total of 5,500,000 bushels produced in the country in that year. Seven or eight years ago experiments were made in raising the cereal on the prairies in the eastern part of the State, where land could be bought at prices ranging from $1 to $5 an acre. Now those lands bring per acre from $35 to $50, and even more. The rice acreage in the State has expanded from practically nothing to 60,000 acres in 1910, producing 2,400,000 bushels and yielding at the farm $1,600,000. Prairie-grown rice has placed Arkansas third among the 10 rice-producing States in this country, and last year it ranked first in the average yield per acre—40 bushels. The average yield per acre in the seaboard States—North Carolina, South Carolina, Georgia and Florida—which formerly dominated in rice production, was 21.5 bushels per acre, but the average price per bushel was 75 cents, while the average price per bushel in Arkansas was 70 cents. Arkansas, however, produced nearly five times as much rice as the four older States combined, and its crop of 2,400,000 bushels constituted about one-tenth of the total crop of the country. The figures upon which these estimates are made are from reports of the National Department of Agriculture, and may be regarded as extremely conservative.

They hardly conflict with other statements to the effect that some of this rice-growing land is worth $100 an acre, or that some of it will yield an average of from 70 to 100 bushels to the acre. It is no wonder that land yielding $50 gross per acre brings $100 an acre when it is sold. It is no wonder that the expansion of farming operations in portions of Eastern Arkansas consequent upon the notable increase in rice cultivation has been accompanied by other material advancement in that section illustrated in the establishment at strategic points within the past five or six years of half a dozen or more rice mills representing an investment of between $750,000 and $800,000 and in the investment of other money in provisions for the irrigation of the prairie lands by means of wells.

Arkansas is duplicating the experience of Louisiana, where, at Crowley, less than 20 years ago, wheat-growers from other States adapted their machinery to the cultivation and harvesting of rice, and where the acreage last year was 371,200 of the total 722,800, and the yield of 12,769,000 bushels was more than 50 per cent. of the total crop in the country. The success of Louisiana was largely responsible for the development of rice-growing in Texas, bringing that State to the second place in production. An interesting fact in this connection is that nine Southern States raised last year 24,507,000 bushels of rice, having a farm value of $16,622,000, and the same States raised 49,000,000 bushels of wheat, valued at $47,000,000. In those States, and especially in the three States, Arkansas, Louisiana and Texas, now producing 23,000,000 bushels of rice annually, there is still opportunity for considerable expansion in wheat acreage and in production of wheat per acre. There is far greater opportunity, though, for rice production to meet the demand that must come when the value of rice as food becomes better and more widely recognized.

CUT-OVER PINE LANDS.

The Mississippi Pine Association is considering plans for the utilization in agriculture of about 2,000,000 acres of cut-over pine lands. Similar projects are under way in Texas, and Mr. A. B. Graves, secretary of the Louisiana Development League, and also of the Louisiana Meadows Co., reports, among hundreds of inquiries about the reclaimed wet lands of Louisiana, many regarding cut-over lands. The New Orleans *Times-Democrat* reports him as saying:

> Of course, we all expect the demand for Louisiana farms to reach the cut-over lands, but I am surprised that the advertising the wet lands have received should attract growing interest in our cut-over lands, and can account for it only on the ground that the immense publicity campaign we have been carrying on has awakened general interest in Louisiana throughout many States, and that those farmers who are more familiar with cut-over lands are now writing for information.
>
> I am frank to admit this rather sudden demand for cut-over lands has puzzled me to some extent. There is plenty of such land in Louisiana, but as the homeseekers have not been asking for it until recently, adequate facilities for the selling of it have not been created. In the case of the Louisiana Meadows Co., we have devoted all our time and energy to the selling of reclaimed wet lands to Northern farmers, particularly to the farmers of Ohio and Illinois. We do not do a brokerage business, and when we receive inquiries for old cotton and sugar plantations and for lands partly cleared and partly covered with timber we do not know just what to do with them.

Quite naturally, I judge from this that others are also receiving such inquiries, and that a broad and potential demand for such lands will develop as soon as such lands receive the proper exploitation.

In a very few years the marsh lands around New Orleans will all have been reclaimed and brought under cultivation, and by that time there will be four applicants for every little reclaimed farm offered for sale. The cut-over pine lands of this State are very productive, and they will be taken up and settled rapidly just as soon as the Northern farmer learns what can be done with them.

Meanwhile, I do not know where to turn for the kind of properties some of these people are asking for.

The productivity of the cut-over pine lands has already been demonstrated signally in Mississippi. Secretary J. A. Kirby of the Mississippi Pine Association was recently quoted by the Hattiesburg *News* on that point as follows:

There are 2,000,000 acres of cut-over lands around Jackson and Hattiesburg available for settlement. Here is the spot toward which the next great movement of immigrants will be directed. The development is near at hand, and our people should prepare now to reap the full reward. This can be best done through local "model farms" to demonstrate instantly the prospectus what has been done rather than what can be done. The cut-over pine lands are of wonderful fecundity, and with the use of a slight amount of fertilizer will produce truly wonderful crops. They have the peculiar property of being able to produce the crops of the subtropical as well as the temperate climates. Sugar cane, yielding high percentages of saccharine matter, has been grown, and the results obtained from fruits and berries have been remarkably encouraging. It is stated even that the lands will raise cereals, but I can hardly believe it.

In the timber region of the South there are hundreds of thousands of such acreage, and it is only a question of time and proper advertising of their possibilities for these lands to be in great demand. In some cases the expense of removing the stumps, so as to permit a full utilization of the land, has been a drawback. That must, however, disappear, as the history that is now being made in that particular in Wisconsin shall be repeated in the South. Upon the experience in Wiscon, F. G. Moorhead, in an interesting article in the *Technical World Magazine*, predicts that presently the northern portions of the country will be traveled by a steam stump-pulling machine. He writes that the machines are now operating in Wisconsin and Michigan, and are clearing lands of stumps at the rate of from one to five acres a day for each machine. These "painless dentists" of the woods, as Mr. Moorhead styles them, are clearing the land at a cost of about fifteen or twenty dollars an acre, as against thirty-five dollars or more an acre under more primitive methods, and he notes that the steam stump-puller not only does the pulling, but piles the stumps ready for burning.

About eight acres of land can be cleared at one setting of the machine, which is operated by a ninety horsepower three-drum upright engine. He concludes his valuable article as follows:

Some of the best crops Wisconsin yielded last year were grown on stump-eradicated fields which had had absolutely no value as farming land a year or two before. A beginning has been made, and the next few years bid fair to see the tillable area of the Northern States increased and the crop yields augumented with the "smile that won't come off" illuminating the face of the farmer who not long ago scowled perplexedly at his stumpy fields and wondered what on earth to do with the earth at which he could hardly get with his plows and seeders and reapers because of the molars which encumbered it.

The plight of owners of cut-over lands in the South may not be as bad as that of the Wisconsin ones a few years ago. But the South has such lands in abundance, and, in great part, they are not as valuable as they should be, because of the stumps. Let the stumps be removed, and perhaps some of the cost of the removal may be met by the derivation from them of valuable properties yielded by other portions of the pine.

B. E. Looney, secretary of the 25,000 Club, Abilene, Tex., writes to the MANUFACTURERS RECORD in reference to an article bearing upon developments in his city:

We regard the MANUFACTURERS RECORD as one of the best industrial magazines in America.

THEIR WORK ENDED.

During the past week death called two men of influence in the development of the South, Col. Edward L. Russell of Mobile and Calvin B. Orcutt of Elizabeth, N. J. The former was a type of the Southern men who went through the furnace of war and subsequent distress, who were active in the work of rehabilitation and successful participants in latter-day advancement. The former, after three years' service in the Confederate Army, spent two years raising corn and cotton, but at the age of 31, having in the meantime been admitted to the bar, he entered the service of the Mobile & Ohio Railroad, and remained in that service as general solicitor, vice-president and president at different times for 35 years. He developed a great executive capacity, and, making his home at Mobile, threw himself heartily into every movement intended for the welfare of that community and was personally interested in everything bearing upon the material good of the section served by his line.

Mr. Orcutt, successful as a manufacturer and financier, was some years ago placed in charge of the business of marketing the produce of the Chesapeake & Ohio Railroad Co., which led to his being given the care of the Huntington interests at Newport News, Va., which in the past 25 years developed from a fishing hamlet to a great center of industry, and where he became president of the Newport News Shipbuilding & Drydock Co., of the Newport News Light & Water Co., of the Chesapeake & Ohio Coal Agency Co., and of the Old Dominion Land Co., and a director in the First National Bank.

THE STEEL CORPORATION.

At the regular quarterly meeting on Tuesday of the directors of the United States Steel Corporation, Mr. James A. Farrell was elected a director and also president of the Corporation, as had been forecast in the suggestion of the finance committee two weeks ago. In a statement following the meeting, Judge E. H. Gary, Chairman of the Board, said:

"The reports of general managers of sales, which we get weekly, are all very favorable. More so than at any time during the last six months. Our last daily report of bookings was January 27, and, including that day, the bookings per day were for the month of January 30,000 tons per day, not including any of the large orders for rails which we have been receiving during the last two days and which are not reported yet. This compares with 22,000 tons a day in December and a similar amount in November.

"Tin plate business and the wire business are particularly very active; also the export business, but in all lines there is marked improvement, and we have witnessed an increase in operations. The percentage of operation has considerably increased.

"Earnings for 1910 were $141,144,000, compared with $131,491,414 in 1909 and $91,847,710 in 1908."

NASHVILLE AS A GREAT HARDWOOD MARKET.

By JOHN LEIPER.

[Written for the Manufacturers Record.]

How much longer will Nashville stand at the front as one of the great hardwood centers of the world? This is a question of interest to many lumber manufacturers here as well as in other sections. For a number of years Nashville has been a great market for hardwood. The stock of lumber carried in Nashville and contiguous territory which ships to this city is estimated at 150,000,000 to 200,000,000 feet. With the passing of years, however, the source of supply has been diminishing, and it is probable that the greatest annual production has been realized. While Nashville has been exhausting the available supply of timber, Memphis has been forging to the front, and the record the past year will show that city in all probability to have won the distinction which Nashville has heretofore enjoyed. A number of large lumber companies have been organized in Memphis the past few years, and put into successful operation, and that city has a large territory from which to draw its raw material that will keep it at the front as a lumber center for many years to come.

S. Lieberman, one of the veteran lumber manufacturers of Nashville, predicts that within 20 years all of the first-class timber available for the Nashville market will have been consumed. After that date Mr. Lieberman thinks that only second-class timber can be secured. When asked for his opinion of the possibility of a second growth of hardwood timber Mr. Lieberman stated that he did not attach any importance to any hopes based on such a proposition. Mr. Lieberman said that his company has been taking notice of the second-growth timber, and that the supply from this source is insignificant. Some results have been seen in the second growth of cedar and walnut, but Mr. Lieberman says that the amount of second growth of these two classes is small. The second growth of other important classes has been of no consequence.

The United States Government recently assigned a man to come to this territory to make an investigation on the matter of second growth of timber, but the result of this investigation will not become public for some time to come. The result of such an investigation should be of national interest in the study of the lumber supply of the future.

Nashville's lumber supply has come largely from a territory within a radius of 150 miles of the city throughout Middle Tennessee. The Cumberland River is the means of transportation of a great part of the lumber to this market, many millions of feet from this source being transported 300 to 400 miles by water. Not including the river, the Louisville & Nashville and Nashville, Chattanooga & St. Louis railways bring the largest supplies of fine lumber to Nashville. Poplar, oak, ash, chestnut, hickory, walnut and other native timbers abound on these lines and their branches south of Nashville. Year after year the log men have been going farther and farther into the interior to get the logs, and now they have to be hauled eight to ten miles to the railroads. The supply is light within a closer distance to the railroad. There are now remaining in the Middle Tennessee section very few large tracts of timber that are not being developed.

In the Cumberland River territory timber can be moved only during the winter months, when the tide is high enough to float rafts. The supply coming by way of the river is made much larger by reason of the tributaries of the Cumberland. The Obey River, Caney Fork and numerous other smaller tributary streams traverse a large area of country in upper Middle Tennessee and the edge of Kentucky. During the high tides of the rainy seasons of the winter logs are floated down all of these tributaries. Large rafts are made of the logs, and they are floated to Nashville. The amount of timber that has come to Nashville during the past from the upper river has been 40,000,000 to 50,000,000 feet annually. This supply has consisted largely of poplar, oak and chestnut, with a liberal sprinkling of walnut, hickory, ash and other native hardwoods. Poplar is one of the most important timbers of the upper Cumberland. During the time when the automobile industry was at such a height lumber manufacturers of Nashville reaped a rich harvest furnishing factories with supplies of the finest poplar. Values went to the highest level ever before known.

While some lumbermen do not like to talk of the supply being exhausted, saying that this agitation has been going on for many years and the timber continues to come to market as in the past, it is recognized that it is getting scarcer with each year. In the territory of the Cumberland River and its tributaries log men now have to go back into the interior 10 miles and farther in order to get the best logs and move them to the banks of the rivers by means of wagons to await the high tides. Old lumbermen say that each year the log men have to go a greater distance to get the timber. This fact is true in connection with what has been the largest hardwood market of the world, making the situation with regard to the Nashville market of more than passing interest.

One veteran lumberman, in talking of the situation, stated that Indiana was at one time one of the richest timber States of the Middle West, but its great forests have disappeared. At present Indiana is one of the largest purchasers of lumber turned out in the Nashville market. The factories of Evansville, Indianapolis and other cities in that State take millions of feet of lumber from this market each year.

"What we need most in Nashville is factories," said the lumber manufacturer to the correspondent of the MANUFACTURERS RECORD. "If we had the factories to convert the lumber into finished products we could accomplish a great deal in development and building up the resources of the city and the South."

At the present rate of consumption the time is not very distant until the same story will be told of Middle Tennessee as is now related of Indiana with regard to the lumber industry.

During the past year only one large lumber plant has been established in Nashville, that being the plant of the Tennessee Oak Flooring Co. This company installed a plant at a cost of about $50,000, and has a capacity of 20,000 to 30,000 feet of hardwood flooring daily. The Nashville Hardwood Flooring Co. is probably the largest establishment of the kind in the country, having a daily capacity of 40,000 to 50,000 feet. The hardwood flooring of Nashville is shipped to many points throughout the country, and has been used in some of the large buildings in New York city.

The export trade of Nashville amounts to a considerable item, being estimated at $500,000 to $1,000,000 annually. These shipments are made to England, Germany and other countries.

John B. Ransom, who died last year, was the wizard of the lumber industry of Nashville. Mr. Ransom came to Nashville from Murfreesboro, Tenn., something over 20

FAYETTE R. PLUMB TOOL WORKS AT ST. LOUIS.

This is a view of the completed plant described and illustrated by the MANUFACTURERS RECORD when first announced last year. There are 16 buildings; 14 are one story high and mostly 60x100 feet in size; two are two stories high; 13 are devoted to manufacturing; the total floor space is 78,000 square feet; the buildings and equipment were designed for the economical production of high-grade tools and the comfort and safety of employes. Fayette R. Plumb, Inc., is a Philadelphia corporation which has built this plant to meet the increasing demand for its product in the South and Southwest, and it is understood that about $1,000,000 has been invested at St. Louis.

years ago, with very limited capital, and started a small lumber establishment. He understood thoroughly the lumber trade, and was confident of increasing values with the passing of years. His business grew by leaps and bounds, and when death overtook him at middle age he had accumulated a fortune of nearly $1,000,000, which was earned on his merits as a lumber dealer of great foresight. He was president of John B. Ransom & Co. and the Nashville Hardwood Co., at present two of the largest lumber plants in the city. Mr. Ransom lived to see Nashville reach her greatest glory as a hardwood market, and at the time of his death the effect of decreased supply was just beginning to be felt. He also had large lumber interests in Memphis, which are being continued by others. His son and brothers are at the head of the plants which he started so successfully in Nashville. Mr. Ransom was several times president of the Hardwood Association of the United States.

The Davidson, Greene & Hicks Company of Nashville has been doing a great work in the development of hardwood lumber in Middle Tennessee. This company has completed facilities for getting out timber in Overton and Fentress counties on a large scale. Some 15,000 or 20,000 acres of timber land has been purchased by the company. Fifteen miles of railroad have been built exclusively for handling lumber, and the railroad is owned and operated by the local company. The road connects with the Tennessee Central Railroad. At present five mills are in operation on the timber land, turning out an enormous amount of lumber. A large part of the output is shipped to Nashville, where it is placed on the market or used in a furniture factory owned by the same interests. The timber land is in a mountainous section, and much expense is required in getting it out. The company has built two inclines, which run down mountains for a distance of about a mile each, and are used for moving the lumber to the railroad. These inclines are operated by means of steam power and wire cables.

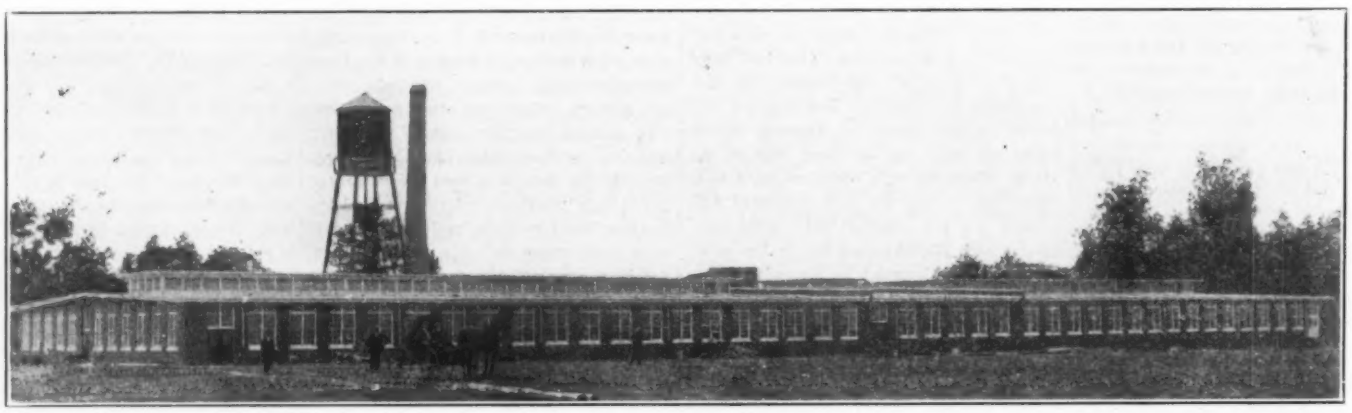
ARKANSAS STATE CAPITOL AT LITTLE ROCK.

Occupied on January 1, 1911; building is 172x435 feet; 232 feet high; exterior walls of Batesville stone; dome of steel, concrete and stone; interior finished in quartered oak; white marble stairways; white marble trim and floors; wide corridors, with space for mural decorations; niches for statues; cost about $1,540,000, not including furnishing, beautifying of grounds, finishing basement and sub-basement, coloring walls and interior decorations; original architect, George R. Mann of Little Rock; architect for reconstruction and interior finish, Cass Gilbert of New York.

Lieberman, Loveman & O'Brien is one of the large pioneer lumber concerns of Nashville, carrying a stock of probably 8,000,000 or 10,000,000 feet. This firm does a large shipping business, and also export trade. The Southern Lumber & Manufacturing Co. is a young company, which does a large shipping business. There is a score or more of smaller lumber establishments in Nashville, and numerous box factories and woodwork establishments of different kinds.

Murfreesboro, 30 miles south of Nashville, has been for years a great center for red cedar lumber. There are turned out at that town cedar buckets, churns and chests which are highly prized by housekeepers. A pencil factory has also consumed an immense amount of red cedar at that place, and is still in operation. For many years heavy drafts have been made upon the red cedar in the section around Murfreesboro, and the market is still well supplied. Talks with lumbermen indicate that there is some hope of future growths of this lumber being of sufficient quantity to be of importance during coming years. In fact, it is said that a considerable amount of cedar that might be considered the second growth is now being marketed. This new timber, however, does not compare in quality with the magnificent supplies that were offered during earlier years.

The first half of 1910 was a prosperous time for the lumber manufacturers of Nashville, but there was dullness during the latter part of the year. However, the total volume of business was as large, or probably larger, than 1909. Manufacturers generally take a cheerful view of the outlook for 1911, and believe that the coming spring will witness great activity in the lumber industry.



JENNINGS COTTON MILLS AT LUMBERTON, N. C.

This plant cost about $275,000. It is being equipped with 8000 spindles and accompanying machinery for a weekly capacity of 30,000 pounds of carded and combed American and Egyptian yarn; main building is 464 feet long and 131 feet wide; will begin production by March 15; president, H. B. Jennings of Lumberton; architect-engineer in charge, J. E. Sirrine of Greenville, S. C.; other details heretofore announced by the MANUFACTURERS RECORD.

Recent Progress and Plans at San Antonio.

[Special Correspondence Manufacturers Record.]

San Antonio, Tex., January 26.

With the enlargement of the St. Anthony and Menger hotels, and the construction of the entirely new Gunter Hotel, there have been added to the hotel facilities of San Antonio vastly more and much better accommodations for the general traveling public. This will result in a great increase in the tourist business, and assurances are that San Antonio will have the most prosperous year in its history.

While there is no large number of new buildings under way in San Antonio, there are two or three interesting improvements in hand, and a number of important buildings have been panned within the recent past.

One of the notable new buildings is that of the West Texas Military Academy, now being constructed of reinforced concrete throughout, built from the plans furnished by H. A. Reuter, architect, of San Antonio.

The new building, as shown by the architect's drawings, will present a very imposing and decidedly military appearance. It is being constucted by the Aiken Cement House Co. of Texas, managed and directed by two former students of the academy, Messrs. W. E. Simpson and G. C. Simpson.

A novel feature in the method of construction is that hollow walls have been made possible by a device of the Simpsons, by means of which a hollow wall is secured by the use of sand, which, after the wall is poured and erected, is flushed out. The walls are molded on their backs, one at a time, on a flat platform which is afterward tilted up into its proper vertical position with the aid of special raising jacks. After the walls are in proper position the corners are anchored together with steel and concrete floors poured inside, the floors themselves being securely anchored to the walls with steel, and forming, when complete, a building which is one solid piece of concrete. Some remarkable work has been done by this method, and the Simpsons now have in preparation a wall of 300 feet which they propose to pour and then raise with one operation.

The newest office building in the city is the Bedell building, adjoining the Moore building and belonging to the Moore estate. This is of steel and concrete construction, reinforced, with a brick veneer. It is six stories in height, having 166 feet frontage on Avenue C, and an average depth of 131 feet. Construction started on May 27, and on November 1 three-fourths of the ground floor was occupied. The entire structure cost $350,000. It has one of the most complete electric-lighting plants in the South, of 450 horse-power boiler capacity; the engine of 438 horse-power capacity. The plant furnishes light, heat and power for the Bedell and Moore buildings. The two buildings—the Bedell and Moore—have 570 rooms, making it the larges office building under one management in the State. The architect is Atlee B. Ayres and the contractor J. P. Haynes, who also built the Moore building. The original building was constructed in 1903, and considerably enlarged in 1907.

The Moore estate is putting up a building 154x63 feet, adjoining the Bedell building, to be used as a repair shop and garage for automobiles. The estate owns the entire block, running from Avenue C to Avenue D, on 3d street, and will eventually fill out the block. The materials for the buildings incuded over 15,000 barrels of cement, which was furnished by the San Antonio Portland Cement Co. Other materials: Steel from the Phoenix Iron Co.; ornamental terra-cotta, St. Louis Terra-Cotta Co.: face brick from the Fraser-Meyer Brick Co., Ginger, Tex.; generator and switchboard from the General Electric Co.; boiler from Casey & Hedges; engine, Ball Engine Co. The Evans Marble Co. of Baltimore have the contract for all the marble work for the interior finishing, the material being Skyros and Formosa. The three elevators were furnished by the Otis Elevator Co.

The Gunter office building was completed early in the fall, and was largely occupied as soon as tenants were able to move in. This building is eight stories high, and is a steel-frame building encased in reinforced concrete, with brick exterior. All partitions are of tile. The dimensions of the building are 86 feet frontage on East Houston street by 106 feet depth between parallel lines. The building is open on three sides—Houston street, St. Mary street and an alley on the north. Above the first floor there is a court, opening to the east on St. Mary street, 22x60 feet, which gives every room in the building an outside opening. On the first floor there are five stores, three on Houston street and two on St. Mary street. The elevator entrance of the building is on Houston street. The corridors of the building are wainscoted with marble, and have tile floors. The interior woodwork is quarter-sawed oak, with Flemish oak stain. The building was designed by Messrs. Mauran & Russell of St. Louis, after the most improved plan for modern office buildings, and was erected by the Westlake Construction Co., also of St. Louis. The cost was $300,000. An outside feature of the building is a copper canopy above the stores on Houston and St. Mary streets.

The Southwestern Telegraph & Telephone Co. has erected, for office and other purposes, a six-story reinforced concrete building on Travis street, on the north side of the street, opposite the property owned by the San Antonio Hotel Co. This is a modern structure, and cost tbout $150,000.

An apartment-house of reinforced concrete, six stories in height, absolutely fireproof, is to be erected for Dr. L. L. Shropshire on plans furnished by Brown-Lamberth Company, who have recently moved to San Antonio from Los Angeles. The lobby is to be finished in scagliola; all corridors, baths, toilets, kitchens to have tile floors and wainscoting all throughout and finished in hardwood. The building will contain garage, bowling alley, billiard hall, rathskeller and delicatessen, machinery-room, trunkroom. There will be a lobby and social hall, quarters for public stenographer, curio and stationery department and office. The building is to have 3200 feet veranda space. Two hundred and twenty-five living-rooms are provided, 75 of them being apartments with private baths and 12 single rooms. There will be 10 public baths, besides linen rooms and janitors' rooms. A children's roof playgrounds will be provided, and will, among other things, have swings, toboggan slides, sand-boxes, jetter boards, merry-go-rounds and wigwams. There will be an observatory tower 75 feet in height. The building will be fully equipped with every practical modern apartment-house device, including automatic electric elevators, electricity and gas for lights and fuel, self-regulating steam-heating plant, centrifugal water-cooling system, hot and cold water in each apartment, electric vacuum dust remover, a novel and complete system of kitchen convenience, complete telephone system to each department, and city lines with house communication system attachment. There will be introduced in this building a novel sanitary sleeping arrangement and dressing-room combined, which has been in use in Los Angeles and other Pacific coast cities, but which is new to the East. The building will represent a total investment of from $250,000 to $300,000.

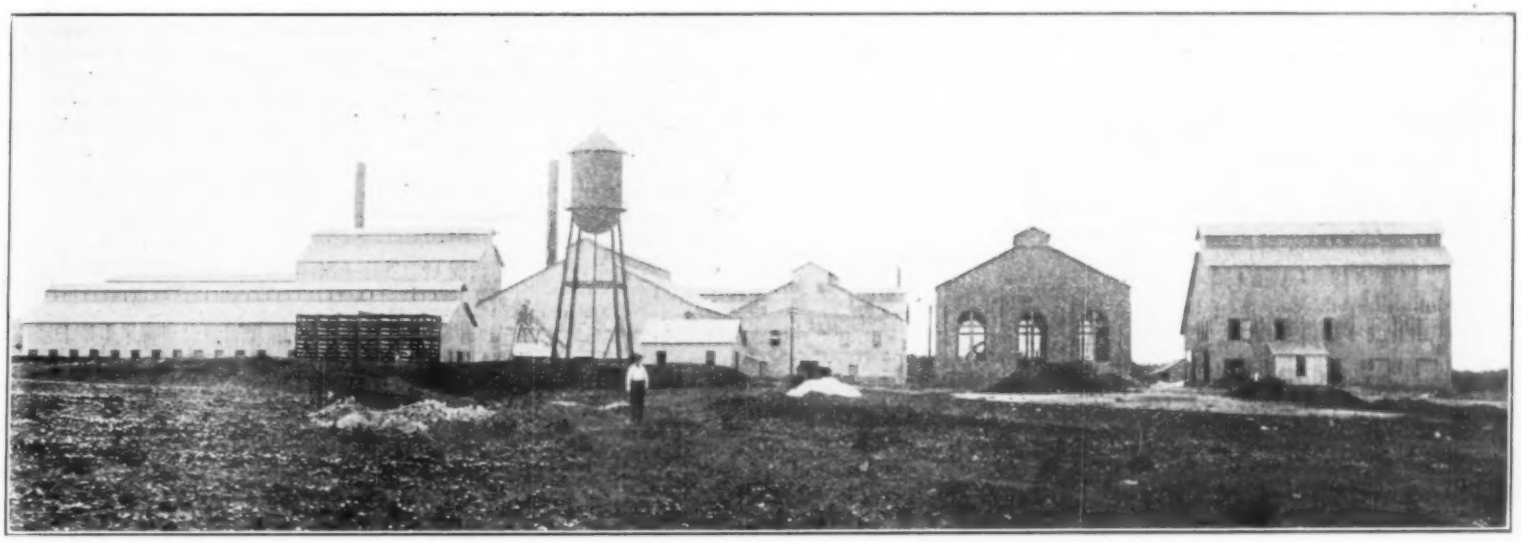
The Travis Club has been organized at San Antonio to build a handsome clubhouse on the corner of Jefferson and Travis streets, facing Travis Park, and adjoining the St. Anthony Hotel, between which and the clubhouse a passageway will be built. The enterprise was put under way by Charles H. Genslinger, who has had an extensive and uniformly successful experience as a founder of clubs in many of the most important cities of the country. The Travis Club will be formed along the lines of the Jonathan Club of Los Angeles, one of Mr. Genslinger's most notable undertakings. The officers of the club include many of the most prominent men of San Antonio, as follows: President, Albert H. Danforth; vice-president, Lane Taylor; treasurer, Dr. T. T. Jackson; secretary, Charles Henry Genslinger, and advisory board, Gen. John L. Bullis, R. L. Ball, L. B. Clegg, Andrew P. Calhoun, T. L. Conroy, C. S. Fowler, Emil Frank, A. H. Jones, J. H. Kirkpatrick, Gen. James G. C. Lee, Harry Landa, W. B. Lupe, Robert Maverick, W. F. McCaleb, Walter Napier, B. F. Nicholson, Col. Ike T. Pryor, Judge Arthur W. Seeligson, J. H. Savage, H. O. Skinner and Marvin Trice.

The plans have been drawn by Henry T. Page & Co. of San Antonio, who designed and built the Metropolitan Club and the Army and Navy Club of Washington, D. C., and many other buildings of the same class. It will be of reinforced concrete construction and brick, two stories and a basement, and also having a roof garden. Dimension of the building proper will be 77x150, with 10-foot terrace promenade around two sides. In the basement will be an immense concrete swimming pool. Lights, heat and cuisine service will be furnished under contract with the St. Anthony Hotel management.

It is proposed to set apart certain hours every week for the benefit of ladies and children, when they will have exclusive use of the natatorium and Turkish and Roman baths. It is also proposed to found a Country Club in connection with the Travis Club, with an 18-hole galy course among other features.

Bids for the entire work of constructing the clubhouse will be opened February 7. The estimated cost of the work is between $40,000 and $50,000.

The Chamber of Commerce proposes to inaugurate a vigorous campaign to secure factories for San Antonio. A fund for advertising the industrial opportunities here is to be raised, and efforts will be made to arouse local interest, as well as outsiders, in the belief that considerable industrial development is a possibility in this city. A number of industries in varied lines have been substantially located and operated here for a number of years, and with the exceedingly favorable climatic conditions the number of people in San Antonio who have come here and who live here to enjoy the climate are therefore more willing to work at a reasonable wage



PLANT OF SAN ANTONIO PORTLAND CEMENT CO.

or salary than would be the case otherwise, because San Antonio is already the metropolis and distributing point for a large and constantly-increasing population in Southwest Texas, and because the variety of products for which raw materials may be assembled here as easily and cheaply as in many other localities, it is believed that with the proper spirit and co-operation on the part of local men of means that a very substantial headway may be made in locating factories in San Antonio.

Managerial ability, skill and industry are the vital factors everywhere, and there are in San Antonio a number of illustrations to prove that successful industries are successful here whenever they are given the benefit of managerial ability, skill, industry and sufficient capital.

The San Antonio Machine & Supply Co. is an immense institution with a foundry plant and factory that turns out windmills and other products, and does a machine and supply business extending even into Old Mexico.

The Alamo Iron Works is also a large concern, with an adequate foundry also, from which they turn out pump jacks; they also manufacture cypress tanks.

The Southern Structural Steel Co. is engaged extensively in the manufacture of jails, portable and otherwise, and sells its product throughout eight States.

Ed. Friedrich has an immense plant, established in 1883, in which refrigerators and ice boxes are manufactured for butchers and grocers; pool and billiard tables made complete; showcases and several other lines turned out.

These are given merely as illustrations of successful industries which have been built up in San Antonio. There is undoubtedly a large variety of industries which could be successfully established here if given the proper co-operation, management, capital and determination to succeed.

A very interesting industry developed here is that of the San Antonio Portland Cement Co., built up as an extension of the Alamo Cement Co. It is an interesting fact that the Alamo Cement Co. is the oldest cement plant west of the Mississippi River, having been established in 1880 by Charles Baumberger, who had previously had a thorough experience in cement manufacture in the North. He is still the president of the Alamo and San Antonio Portland Cement companies, and has associated with him local men of ample means.

The new plant of the San Antonio Portland Cement Co. represents an expenditure of about $1,000,000, which will provide for a capacity of from 1200 to 1500 barrels of cement daily. The new plant of the company is located in a suburb of San Antonio on grounds comprising 325 acres. The buildings are of steel construction and represent the most modern ideas in cement manufacture. The plant is on a spur of the International & Great Northern Railroad, and is served with two lines of track. The stone quarry is situated so that the material is delivered to the plant by gravity. An oil-burning plant has been installed for the burning of the clinker. The power is obtained from Smith gas producers, Lexington, O., in which lignite from Rockdale, Tex., 150 miles distant on the International Railroad is used. The lignite costs about $1 at the mines, with 76 cents freight added. The plant demonstrates that in the use of this lignite a fraction under two pounds per horse-power per hour is consumed.

The product of this plant is a very high grade of cement, the analysis showing it to contain 21 to 22 per cent. silica, aluminum 8½ to 9, iron 2, magnesia a trace, lime 64 per cent., and of anhydro sulphuric acid there is only what is added as a retarder. The breaking strength of this cement is 800 to 1000 pounds in seven days, 24 hours an average of 500 and three days 750 to 800.

The water supply of the plant is from a deep well. A contract was made with the Allis-Chalmers Company for the entire plant, and all the machinery, except the conveyors, was furnished by the contractor. The Jeffrey Manufacturing Co. of Columbus, O., furnished the elevator, conveyors and bins. The gas engine is of 650 horsepower. There are individual motors throughout, direct connected to a 350-kilowatt generator. An additional 1000-horsepower engine and generator will hereafter be installed.

It would appear to be obivous that a very notable industrial development in San Antonio simply depends on the amount of energetic effort brought to the task of working out the situation.

ALBERT PHENIS.

PIG-IRON IN 1910.

The Total Production Reached 27,298,545 Gross Tons.

The American Iron and Steel Association has received from the manufacturers complete statistics of the production of all kinds of pig-iron in the United States in 1910.

The total production of all kinds of pig-iron in 1910 was 27,298,545 gross tons, against 25,795,471 tons in 1909, an increase of 1,503,074 tons, or over 5.8 per cent. The production in 1910 was the greatest in our history, the former record year being 1909. The following table gives the half-yearly production in the last four years in gross tons:

Periods.	1907.	1908.	1909.	1910.
1st half..	13,478,044	6,918,004	11,022,346	14,978,738
2d half..	12,303,317	9,018,014	14,773,125	12,319,807
Total..	25,781,361	15,936,018	25,795,471	27,298,545

The production in the second half of 1910 shows a decrease of 2,658,931 tons, or over 21.5 per cent., as compared with the first half.

The production of Bessemer and low-phosphorus pig-iron in 1910 was 11,244,612 tons, against 10,557,370 tons in 1909, an increase of 687,242 tons, or over 6.5 per cent. In the second half of 1910 the production was 4,920,729 tons, as compared with 6,323,883 tons in the first half, a decrease of 1,403,154 tons. The production of low-phosphorus pig-iron alone in 1910 amounted to 259,077 tons, against 212,615 tons in 1909. The production of Bessemer and low-phosphorus pig-iron in 1910 was 2,595,906 tons less than in the banner year 1906, when it amounted to 13,840,518 tons.

The production of basic pig-iron in 1910, not including charcoal of basic quality, was 9,084,520 tons, against 8,250,225 tons in 1909, an increase of 834,295 tons, or over 10.1 per cent. In the second half of 1910 the production amounted to 4,140,578 tons, against 4,943,942 tons in the first half, a decrease of 803,364 tons. The total in 1910 was the largest in our history, the former record year being 1909.

The production of spiegeleisen and ferromanganese in 1910 was 224,431 tons, against 225,040 tons in 1909, a decrease of 609 tons. The production of ferro-manganese alone in 1910 was 71,376 tons, against 82,209 tons in 1909. Of speigeleisen alone the production was 153,055 tons, against 142,831 tons in 1909. In addition several thousand tons of ferro-phosphorus were produced in 1909 and 1910.

The production of bituminous coal and coke pig-iron in 1910 amounted to 26,255,086 tons, as compared with 24,721,037 tons in 1909, an increase of 1,534,049 tons. In the first half of 1910 the production was 14,382,346 tons, and in the second half it was 11,872,740 tons. A small quantity of iron made experimentally with manufactured gas is included for 1909, but not for 1910.

The production of mixed anthracite and coke pig-iron in 1910 amounted to 649,082 tons, as compared with 698,431 tons in 1909, a decrease of 49,349 tons. In the first half of 1910 the production amounted to 376,739 tons, and in the second half it was 272,343 tons.

The production of pig-iron with anthracite coal alone in 1910, included above, amounted to 20,503 tons, against 16,048 tons in 1909.

The production of charcoal pig-iron in 1910 was 394,377 tons, against 376,003 tons in 1909, an increase of 18,374 tons. A small quantity of pig-iron made with charcoal and electricity is included in the figures for 1909 and 1910. In the first half of 1910 the production amounted to 219,653 tons and in the second half to 174,724 tons. No pig-iron was made in 1909 or 1910 with mixed charcoal and coke.

The whole number of furnaces in blast on December 31, 1910, was 206, as against 293 on June 30, 1910, and 338 on December 31, 1909. The number of furnaces idle, including furnaces being rebuilt, on December 31, 1910, was 267, against 180 on June 30, 1910, and 131 on December 31, 1909.

On December 31, 1910, there were 17 entirely new furnaces in course of erection, 16 of which will use mineral fuel and 1 will use charcoal, as follows: New York, 2; Pennsylvania, 8; Ohio, 3; Illinois, 2, and Minnesota, 2. In addition one furnace in Virginia was partly erected, but work on its construction had been definitely suspended.

On December 31, 1910, there were seven furnaces which were being rebuilt, all mineral fuel, as follows: New Jersey, 1; Pennsylvania, 2; Maryland, 1; Virginia, 1; Alabama, 1, and Ohio, 1.

These statements are from the Bulletin of American Iron and Steel Association, which sets forth in a supplement details by States and by years as follows:

Total Production of Pig-Iron by States.

	Blast Furnaces. In blast June 30, 1910.	Dec. 31, 1910. In.	Dec. 31, 1910. Out.	Dec. 31, 1910. Total.	Production—Gross tons. (Includes spiegeleisen, ferro-manganese, ferro-silicon, ferro-phorus, etc.) First half of 1910.	Second half of 1910.	Total for 1910.
Massachusetts	1	1	1	2	7,505	9,077	16,582
Connecticut	2	3	0	3			
New York	18	15	14	29	1,017,951	920,456	1,938,407
New Jersey	3	2	7	9	155,087	109,694	264,781
Pennsylvania	116	74	90	164	6,065,688	5,206,432	11,272,120
Maryland	4	2	3	5	170,708	155,506	326,214
Virginia	11	9	17	26	244,275	200,701	444,976
Georgia	0	1	3	4	6,725	4,000	10,725
Texas	0	0	4	4			
Alabama	24	20	30	50	1,012,545	926,602	1,939,147
West Virginia	1	1	3	4	137,439	37,222	174,661
Kentucky	3	2	6	8	46,520	53,989	100,509
Tennessee	12	10	10	20	235,969	161,600	397,569
Ohio	30	35	41	76	3,210,562	2,540,505	5,751,067
Illinois	20	21	15	36	1,552,169	1,123,486	2,675,646
Indiana	6	3	6	9	716,832	533,271	1,250,103
Michigan	11	9	7	16			
Wisconsin	4	4	3	7	170,814	136,612	307,426
Minnesota	1	1	0	1			
Missouri	2	1	1	2			
Colorado	4	2	4	6			
Oregon	0	0	1	1	227,958	200,654	428,612
Washington	0	0	1	1			
California	0	0	0	0			
Total	293	206	267	473	14,978,738	12,319,807	27,298,545

Production of All Kinds of Pig-Iron from 1906 to 1910.

States—Gross tons.	Production (Includes spiegeleisen, ferro-manganese, etc.) 1906.	1907.	1908.	1909.	1910.
Massachusetts	20,239	19,119	13,794	18,388	16,582
Connecticut					
New York	1,552,659	1,659,752	1,019,495	1,733,675	1,938,407
New Jersey	379,330	373,189	225,372	294,474	264,781
Pennsylvania	11,247,869	11,348,549	6,987,191	10,918,824	11,272,120
Maryland	386,709	411,833	183,502	286,856	326,214
Virginia	483,525	478,771	320,458	391,134	444,976
Georgia	92,599	55,825	24,345	26,072	10,725
Texas					
Alabama	1,674,848	1,686,674	1,397,014	1,763,617	1,939,147
West Virginia	304,534	291,066	65,551	228,282	174,661
Kentucky	98,127	127,946	45,096	86,371	100,509
Tennessee	426,874	393,106	290,826	333,845	397,569
Ohio	5,327,133	5,250,687	2,861,325	5,551,545	5,751,067
Illinois	2,156,866	2,457,768	1,691,944	2,467,156	2,675,646
Indiana	369,456	436,507	348,096	964,289	1,250,103
Michigan					
Wisconsin	373,323	322,083	148,938	348,177	307,426
Minnesota					
Missouri					
Colorado	413,040	468,486	313,071	382,766	428,612
Washington					
California					
Total	25,307,191	25,781,361	15,936,018	25,795,471	27,298,545

Texas City Plans.

Referring to the visit last week of Capt. A. B. Wolvin, president of the Texas City Transportation Co., to Texas City, the Galveston *News* says:

"The party arrived on Tuesday, and spent the remainder of the week in inspecting the Texas City holdings and is deciding upon plans for future expenditures. It has been decided to at once complete the first unit of the dock system, which has been in course of construction for some time, and which is nearing completion. It has also been decided to spend approximately $1,000,000 in the construction of another pier, which it is intended shall be ready for the next cotton season. This pier, it is learned, will be designed especially for the rapid and economical handling of cotton. Several miles of additional trackage in the yards will be laid, besides more warehouses.

"Captain Wolvin stated that the townsite improvements, for which $500,000 is aavilable, will be pushed to a rapid completion. The work is, in fact, well advanced. A gasoline power trench digger is now in operation, working on Ninth avenue north, and following immediately behind it is a gang of workmen placing the 18-inch sewer pipe. Several blocks from the bay shore west have already been laid, and the work is progressing at the rate of about 1000 feet per day. The sewer system will be installed first, after which the water-works system will be put in. In the meantime the electric-lighting system is being put in. A number of streets have been graded, and the work of shelling them is now under way. The streets are first surfaced with gravel, after which a coating of mudshell is put on. The streets are to be shelled from curb to curb. Concrete curbs and five-foot cement sidewalks are to be put in. It will be several months before the work is completed, but when all the improvements are made Texas City will have all the public utilities of a modern city."

Of 100,000 peach trees near Morrilton, Ark., 30,000 are to come into bearing this year.

$50,000,000 FOR IRRIGATION.

Suggested Bond Issue by the State of Texas.

[Special Cor. Manufacturers Record.]
San Antonio, Tex., January 26.

The possibilities of irrigation in Texas have become so promising and the results of this effort so far so profitable that the authorities of the State are making an effort to conduct this work on a scale larger than has ever been undertaken in the history of the world. It is now proposed to issue bonds in the sum of $50,000,000 as an initial step in this work, and also create an irrigation commission to supervise the erection of dams and the conservation of storm waters. Representative Williams has prepared a bill providing for this great irrigation scheme. It is believed that this is a move that will ultimately give a solution of irrigation in Texas. Individual efforts in many parts of the State have proved the fertility of the soil when water is applied and demonstrated beyond a doubt that production has only been tested in a minimum way.

It is maintained by those who are urging bond issues by the State for the purpose named that it will be the longest step so far made in demonstrating that the part of the country once known as the "Great American Desert" is an area with greater agricultural possibilities than any other section of the country. It is understood that the proposed bond issue movement is meeting with general favor throughout the entire State.

Louisiana Drainage Plan.

A preliminary report on the drainage of the fifth Louisiana drainage district, comprising East Carroll, Madison, Tensas and Concordia parishes, contemplates an expenditure for outlet drainage, lateral drainage, etc., now practicable and necessary of $6,013,000, according to a dispatch from Washington. The report says:

"The object of a drainage survey of the fifth Louisiana levee district is to provide a complete, efficient and economical plan for the drainage of the entire district and to secure such data as will enable that plan to be most effectively carried out.

"A plan for the reclamation of this region must consist essentially of two principal features—a system of main drainage channels for carrying the waters of the district to the final point of discharge, and a system of lateral channels for the actual drainage of the land.

"The main system should be constructed by taxing the entire district. For purposes of lateral drainage the district should be divided into natural subdivisions, as determined by the complete survey, and the cost in each subdivision should be met by taxing the land in proportion to the benefits received.

"It is possible, and, in fact, very desirable, to construct this work a part at a time as demand for the land increases. The improvement on Bayou Macon need not be undertaken until developments in Arkansas make it necessary, and improvements in Concordia parish will probably not be practicable until the proposed separation of the Red and Mississipp' rivers is made. Therefore, the only parts of the main drainage which are now desirable are the improvements and relief of Tensas River and the main drainage outlets of Tensas parish. This part of the main drainage system is estimated to cost $1,333,000."

A $2,000,000 Irrigation System.

F. S. Miller of Mercedes, Tex., will prepare plans and specifications for the irrigation system to be constructed by A. L. Stanford of Lyford, Tex., and associates. This system will be located in the lower Rio Grande Valley, and is to water about 60,000 acres of land. It will cost about $2,000,000, and comprise a main canal with numerous laterals capable of furnishing water for 100,000 acres of land. It is understood that there are about 1000 owners of the land comprising the 100,000 acres, and that all have arranged to use the proposed irrigation system.

Growth at Danville.

[Special Cor. Manufacturers Record.]
Danville, Va., January 27.

The cotton mills here, which have a paid-in capitalization of between $6,000,000 and $7,000,000, have not closed a day for years as the result of any lack of demand for goods or unfavorable bus'ness conditions. The only suspensions that have ever taken place have been in order to allow the installation of new machinery and space for enlargement and improvements to the buildings.

The City School Board of Danville has advertised for bids for plans for a new public schoolhouse to be erected on Loya street upon the site of the present building. The bids will be opened on Friday, February 10, at 3 o'clock. The new building will cost between $25,000 and $30,000. It will consist of 13 classrooms, hav'ng a seating capacity of 40 pupils each, principal's office, teachers' retiring-room and an auditorium seating about 500 people. In addition to the above, lavatories, heating plant, etc., are to be provided. E. K. Jones is chairman of the Danville School Board, and Charles E. Hughes the clerk.

Secretary W. A. Moorman of the Commercial Association has prepared a pamphlet showing the comparative valuations and the increases along various lines during the past 10 years. The increase during that period in assessed valuations is 40 per cent., the figures in 1900 being $10,014,279 and in 1910 being $14,027,928. Capital invested in manufacturing plants has increased from $6,000,000 to $11,330,250, and bank deposits from $1,476,153 to $2,808,113. During 1900 the amount of tobacco sold here was 56,252,580 pounds, which brought $3,793,166. During 1910 the amount sold was 58,915,749 pounds for $6,523,191.

The Cliff Spring property, 12 miles north of Martinsville, Henry county, and owned by the heirs of the late Marshall Hairston, will be developed and operated as a resort. Charles Davis is contemplating erecting a magnificent building at an early date. The property is along the route of the Norfolk & Western Railway.

JOHN M. HERNDON.

Gas Producer Engines.

European manufacturers are cultivating in his part of Mexico a market for gas producer engines with more assiduity than Americans, according to United States Consul Wilbert L. Bonney at San Luis Potosi. He says that the demand is for plants of from 25 to 500 horse-power, and that up to 200 horse-power single engines are preferred. These plants are coming into use for pumping, ice-making, small electric-light plants, milling and general manufacturing, and are replacing small steam engines. The efficiency and economy of the producing engine make it most suitable for this district, where fuel is expensive, and where the saving in water is also worth considering.

Appalachian Coal Operators.

The annual meeting of the Southern Appalachian Coal Operators' Association will be held at Knoxville in February. The association was organized in November, 1909, representing a tonnage of a little more than 2,000,000. Its membership now represents about 5,000,000 tons, and the expectation is that within another year every coal interest of importance in Eastern Tennessee and Southeastern Kentucky will be represented.

The Sherman Plant.

The Sherman Machine & Iron Co. of Oklahoma City will invest about $400,000 for constructing buildings and installing machinery to replace its present plant. Details are now being determined, and the construction of the new buildings is expected to be begun within 60 days. The new structures will include a foundry, a machine shop, a boiler shop, a storage warehouse, a woodworking shop, an office and others. As an adjunct to these facilities there will be erected a six-story 140x240-foot fireproof warehouse by the N. S. Sherman Warehouse Co. The latter will be incorporated by N. S. Sherman, Sr., N. S. Sherman, Jr., W. S. Sherman and associates.

For a Water Supply.

Mr. James A. Martin of Johnson City, Tenn., writes to the MANUFACTURERS RECORD:

"Last night the Board of Mayor and Aldermen about decided that they would lay a 16-inch cast-iron pipe line of 11 miles in order to reach an abundance of fine freestone water. The city owns its present water system, and is going to make this expansion at once. It will issue bonds, as they have already been authorized. We are a fast-growing city, and when we get this system in we will have as fine water as there is in the United States. There is an abundance of water and a 600-foot fall in the 11 miles."

For Birmingham.

In furtherance of the plan to induce the development of nearby territory for truck growing and farming generally, the farm movement department of the Chamber of Commerce of Birmingham, Ala., has issued an attractively illustrated booklet giving reliable facts that the homeseeker desires. The publication is an invitation to come to a section of fine climate and cheap and productive land centering about a rapidly-developing section. The booklet has been published under the immediate direction of Secretary S. Hechinger of the farm movement department.

To Build Engine Works.

The Veitch-Matthews Engine Co. of Birmingham, which reorganized recently, is planning the construction of a modern plant for manufacturing its engines. It is capitalized at $250,000, and the officers are: I. A. Lewis, president; George Veitch, Sr., vice-president; E. L. Huey, treasurer; J. M. Lovett, secretary; Wm. A. Lovett, fiscal agent; offices at 120 Empire Building, Birmingham. Dr. Lovett states that the company will want prices on the equipment of its foundry and machine shop for building turbo-rotary engines.

Builders' Exchange Wants Catalogues

The Little Rock Builders' Exchange, 601 State Bank Building, Little Rock, Ark., wants catalogues of interest to architects, engineers and contractors. These catalogues are to be filed for the reference of Little Rock members of the exchange.

Southwestern Life Insurance Co.

In issuing the eighth annual statement of its business, the Southwestern Life Insurance Co. of Dallas, Tex., calls attention to the fact that it will erect during the current year a large modern office building for its home offices on a lot 100x100 feet on Main and Akard streets. This company is of eight years standing, issuing all forms of life insurance, and its full legal reserve is invested in securities approved by the State of Texas and deposited with the State for the protection of its policy-holders. The president of the company is Henry D. Lindsley.

A $500,000 Biscuit Company.

The industrial department of the Business Men's Club of Memphis has closed negotiations with E. H. Travis of New York, insuring the organization of the Memphis Biscuit Co. This company will be capitalized at $500,000, and will build a modern plant for baking crackers, cakes, biscuits and candies. It will erect a 320x407-foot reinforced concrete building containing 400,000 square feet of floor space, and install modern machinery for a daily capacity of six carloads of the products named.

The Appalachian Exposition of Knoxville, which proposes to repeat for two weeks this year the successful undertaking of 1910, has elected Col. L. D. Tyson, president; M. D. Arnold, J. L. Deaver, James D. Sterchi, Dan M. Chambliss, vice-presidents, and Col. Cary F. Spence, treasurer.

The Birmingham Society of Architects has been organized with Harry B. Wheelock, president; Ben Price, secretary and treasurer, and these two officers, with W. C. Weston, J. A. Miller, Hugh Martin, T. U. Water, William L. Welton, Scott Joy, S. Ullman, W. T. Warren and D. O. Whilden, charter members.

The proceedings of the sixth annual meeting of the West Virginia Board of Trade have been published in pamphlet form, and are full of facts showing recent material development in West Virginia and the State's opportunities for development.

In a handsomely illustrated pamphlet the Water and Light Commission of Greensboro, N. C., W. T. Sergeant, chairman, tells the story of the Greensboro water-works during the past nine years since the purchase of them by the city.

The Chamber of Commerce of Spartanburg, S. C., John Wood, secretary, is circulating a folder giving succinct facts about the growth of that community in sentences whose initial letters spell out "Spartanburg, the City of Success."

The address of Vice-President W. L. Reynolds of the Interstate Fire Insurance Co. of Birmingham, Ala., elaborating advocacy of organization and operation of insurance companies by Southern people, has been published in pamphlet form.

The Society of Dallas (Tex.) Architects has organized with J. Ed. Overbeck, president; Otto H. Lang and H. A. Overbeck, vice-presidents; Jerome Harrison, secretary, and C. D. Hill, treasurer.

The seawall fill, requiring about 2,266,000 cubic yards of sand to perfect the original protective plan at Galveston, Tex., was completed last week.

A paper by C. Bowyer Vaux, telling how to prepare a paper for publication, has been published by the Williams & Wilkins Company of Baltimore.

A meeting is to be held at Norfolk, Va., this week to effect a national organization of builders' and traders' associations.

It is announced that the Southern Pacific system is planning extensive colonization of reclaimed lands in Louisiana.

The Pennsylvania Retail Hardware Dealers' Convention will have its meeting at Pittsburg February 7-10.

INDUSTRIES WANTED BY SOUTHERN COMMUNITIES

WHAT IS YOUR TOWN DOING?

The MANUFACTURERS RECORD will be glad to receive from responsible correspondents in every town in the South brief items of news about business conditions and the opportunities for industrial enterprises. This information is desired for publication without cost of any kind to the sender, and regardless of whether the writer of the letter is a subscriber or not. The MANUFACTURERS RECORD accepts no paid matter in its reading pages. It seeks information of this kind from commercial and industrial organizations and from municipal authorities in every town and city of the South.

This department is open only to news facts of interest to investors, homeseekers and manufacturers. Communications of 200 or 300 words are likely to be given prompter publicity than more extended ones.

Aransas Pass, Tex., January 23.

Editor Manufacturers Record:

J. P. Nelson of San Antonio has the contract for the erection of a modern wharf, warehouses, switches and aprons on Harbor Island for the use of the Aransas Pass Channel & Dock Co., Mr. E. O Burton, president. Construction work is to begin at once, and the work is to be finished and turned over to the company within four months from the date of attaching the signatures to the contract.

According to Chief Engineer C. S. Corrigan, the wharf will be fitted up with a commodious warehouse, 200x600 feet in size, between the lighthouse and the present channel, and between the small channel which runs up toward the lighthouse and the harbor line.

On a recent visit of Major Howell, Government engineer in charge of the waterway for this district, the harbor line was established and permission was given the officials of the Channel & Dock Co. to build their wharves out to the present contour in the harbor, which has been established as a harbor line.

About 3000 feet of switch tracks are called for in the contract, running parallel to the wharf and warehouse. A slip will be dredged back into the island for about 1000 feet and arrangements made to handle three large vessels at one time.

The 20-foot contour in the harbor is only a short distance out from the 12-foot contour where the wharf will be built. Major Howell has already promised to extend the deeper contour up to the wharves when they are finished, the money for which purpose being available from a former appropriation.

At the end of the switches, and near the wharf, an apron will be built. A switch engine used on the tracks at the harbor will bring the material unloaded to the apron, where it will be transferred to the mammoth barges, which will hold at least nine cars, and from that point transferred to the mainland connection by use of another apron, and from here the commerce will be distributed to its destination. On the return trips the barges will carry the outgoing commerce, such as cotton and grain, to be stored in the warehouse and loaded into the ships waiting for cargo.

L. P. BARNES.

ITTABENA'S PROSPECTS.

Ittabena, Miss., January 23.

Editor Manufacturers Record:

Ittabena, or, as the ancient Choctaw Indian name has it, "Home in the Woods," is both romantic and picturesque, and you may yet fancy an Indian snugly ensconced behind some woodland; but as the Indian is not now located around Ittabena, my picture dwells only in the imagination. A colony of active white business men are visible, pushing their interests in every detail, while the Southern Railway and the Yazoo Valley & Mississippi line are the influences at work to introduce all those industrial elements which mean wealth of population and an increase of dollars to all who locate here. Ittabena has cotton gins, seed mills, sawmills, lumber yards, coal deposits, and is an important center for cotton growing on an extensive scale by such agriculturists as Mr. N. L. Cochrell, who farms several square miles. It has an ever-growing population of intelligent citizens, who have brought into the town progressive, go-ahead, real live ideas and living ideals, who, in a word, are men who mean to make a mark on industries and trades for their own wealth as well as the prosperity of the commercial community of which they are law-abiding citizens.

Banking facilities are provided by the Ittabena Bank and the Ittabena Banking & Trust Co., both being highly prosperous concerns. There is also another bank, which, although young in years, is strong in power and influence.

The population of Ittabena district at the present time may be only 8000. The soils require no fertilizer, and are capable of growing any kind of produce, while all kinds of hogs and cattle can be raised to perfection. The houses impress one with an air of prosperity. The climate is excellent, the writer having enjoyed better health in Ittabena than in New York, and his family have done the same.

There is a lake extending about two miles from the center of the town. This immense fresh-water lake is fed from six large artesian springs from a depth of about 600 feet. The depth of water in this lake varies from a few feet to probably not less than 30 or 40 feet in certain portions. This lake is destined to add to the development of an area of 50 or 100 miles or more by utilizing the immense body of water for the production of electrical energy.

THOMAS FENWICK.

GOING TO BRISTOL.

Board of Trade,
Bristol, Va.-Tenn., January 31.

Editor Manufacturers Record:

January leaves a record in Bristol of more than $80,000 invested in industrial enterprises for the last week in the month, and considerably above $100,000 as a total since the Christmas holidays. The newest outside influence to recognize Bristol as a manufacturing point is B. N. Duke, president of the American Tobacco Co., who has invested $20,000 in the capital stock of the Dominion Iron Works. Geo. W. Watts of Durham, N. C., a director in the American Tobacco Co., and chairman of the board of directors of the Seaboard Air Line, has taken an equal amount, and Thomas O'Neil, the well-known Baltimore merchant and capitalist, has subscribed to $15,000 stock in the same enterprise. These three gentlemen have taken the whole allotment of $55,000 asked for in the proposed increase of the stock of the company from $20,000 to $75,000. New buildings will be erected at the plant, and the company will largely increase its output of stoves and foundry products.

The A. L. Womack Company has been incorporated, with a paid-in capital of $25,000, to engage in the canning business. A modern plant will be erected, and the company expects to do a $200,000 business this season. The farmers around Bristol have signed agreements to plant a large acreage in tomatoes and beans, and after this crop is moved the company will go into the market for all kinds of fruit.

The Bristol Showcase Works will soon be in operation, the buildings for same receiving their finishing touches. This company starts business with a capital of $25,000, and has orders already on the books for a line of store fixtures.

The Bristol Sheet Metal Works started up all departments on a night shift last week, and a meeting of the stockholders will be held early in February to increase the capital stock from $50,000 to $100,000. The new stock issue will be limited largely to present shareholders.

Handsome drawings of the new theater to be built in Bristol by George W. Carter of Johnson City are on exhibit in a local show window. The theater will be strictly modern, having a stage frontage of 32x28 feet, and a total with wings of 55x29 feet. It will be three stories in height, built of pressed brick. Offices en suite with baths will be provided. It is announced that contracts will be let without delay.

Geo. W. Carter, president of the Clinchfield road and owner of the Bristol *Herald-Courier*, will erect a building for his newspaper in the spring, plans now being drawn, according to the statement of Frank Leake, business manager of the *Herald-Courier*. Mr. Carter is a former resident of Bristol, and he has a host of friends and neighbors in the city who have heard with pleasure of his proposed investment.

B. L. Dulaney of Bristol and Washington announced, while here last week looking over his properties, that a contract would be let within 90 days for electrifying the Holston Valley Railroad, at present a narrow-gauge steam road operating between Bristol and Big Creek, a bathing and boating resort 10 miles from the city. Mr. Dulaney is the owner of the Holston Valley road and the Bristol Street Railway, and says that cars will be run direct from the city to Big Creek. Because of a contract the railroad has with the Peter-McCain Lumber Co. for operating logging trains, a third rail will be used for the electric cars until such time as more definite arrangements can be made. The lumber company will require the use of the road for at least two years yet.

Manager Ehret of the Twin City Boiler Works has returned from Ohio cities, where he placed orders for machinery that will double the present capacity of the plant.

A. L. Womack will erect a $10,000 brick wareroom in the rear of his present warerooms.

F. M. RUNNELS,
Secretary.

EAGLE PASS AMBITIONS.

Industrial League,
Eagle Pass, Tex., January 17.

Editor Manufacturers Record:

By a decision of the Railway Commission, the city of Eagle Pass has been placed in common point territory with respect to freight rates, which means that this city will now enjoy the same rates as San Antonio, Dallas and Houston and other large cities. The change means a greatly lower rate on practically all the commodities shipped, including hay, grain, flour, groceries, dry goods, boots and shoes, building material, and, in fact, all articles of merchandise.

Eagle Pass will now be able to compete with other cities for her share of the business of West and Southwest Texas, and, what is of greater importance, will now be in a position to secure the majority of the rich and rapidly-growing trade with Northern Mexico.

Being a terminal of the Mexican International Lines, Eagle Pass is the logical point for the distribution of American goods of all description into this great agriculture and mining section of Mexico. Plans for establishing more jobbing houses are already under way.

On account of the coal mines at this point, guaranteeing cheap fuel, and the abundance of the cheapest labor, the coming of factories, especially those catering to Mexican trade, is now assured.

T. C. CARRINGTON,
Secretary.

PROGRESSIVE GREENVILLE.

Board of Trade,
Greenville, S. C., January 28.

Editor Manufacturers Record:

The regular quarterly meeting of the Greenville Board of Trade was held in the rooms of the board on Wednesday evening, and 300 of the representative business men of the city were present. The meeting was in the hands of the Board of Trade committee on new industries, and the purpose was to meet the requirements made by Capt. E. A. Smyth of the city for the proposed Duncan Mills.

In view of the fact that the city had only the first of the previous week subscribed over $300,000 to the Greenville, Spartanburg & Anderson Electric Railroad and $10,000 to a nursery company, there was some doubt in the minds of those present if the required subscriptions could be secured for the proposed mill. Immediately after the meeting was called to order there was no doubt left in the minds of the people, however, as the call for subscriptions was answered from all parts of the room, and in half an hour the proposition made to the city of Greenville was accepted.

The Duncan Mills are to be in charge of Capt. E. A. Smyth, one of the South's best-known cotton manufacturers, and one of Greenville's most progressive citizens. The long subscription list shows the faith the people have in the new project and their unbounded faith in Greenville. The securing of the Duncan Mills gives Greenville two one-million-dollar mills within the past 30 days. The city now has 622,456 spindles, 11,000 operatives, $12,449,000 invested in cotton mills, $13,000,000 output, 41 mills in charge of men who live in Greenville and have their homes in Greenville.

Greenville is much pleased over her efforts, and a season of unbounded prosperity is looked for.

The morning after the Board of Trade meeting it was announced that the Greenville & Knoxville Railroad had recorded a mortgage for $6,000,000, and it is expected here now that the line over the mountain, which will put Greenville in touch with the coal fields of Tennessee, will be erected in the very near future.

E. B. ADAMS,
Secretary.

FREE SITES FOR INDUSTRIES.

Morgan City, La., January 22.

Editor Manufacturers Record:

Several sawmills are contemplated for this place in the very near future.

With the completion of the Atchafalaya ship channel to 20 feet by the United States Government we shall have locations for industries of any character. We have rail and water facilities, and we are going after everything in sight.

I will in the very near future cut a canal through my property, and along a belt railroad will furnish factory sites free and give bonuses according to the number of people employed.

WILLARD DITCH.

OPENINGS FOR INDUSTRIES.

100,000 Club 1920.
Corpus Christi, Tex., January 14.

Editor Manufacturers Record:

Being vitally interested in the development of this city, we are making an effort

to get in touch with a line of industries for which there is a very profitable opening here, viz., cotton compress, cottonseed-oil mill, canning and preserving factory, gas plant, iron foundry, brickyard, overall factory, auto repair shop.

The United States Government has appropriated $157,000 for a 13-foot channel to the Gulf, which will give water transportation to our docks and make an unusually attractive location for factories and business enterprises. Any suggestions you may give to help along the development of our city will be gladly received.

Detailed information about towns seeking manufacturing enterprises and offering specific advantages for development and business opportunities can be found under the head of "Classified Opportunities" on pages 94 and 95, and under "Cities, Towns and Railroads Inviting Factories" on pages 136, 137, 138 and 139.

Propose to Build in Memphis.

Bearing upon plans for electric railway development at Memphis, Mr. Walter Goodman of Memphis, Tenn., vice-president of the Lake View Traction Co., writes to the MANUFACTURERS RECORD:

"The Lake View Traction Co. has now in operation a line from the southern borders of the city to Lake View, Miss., a distance of 11 miles. We are using electric current, 550 volts, direct current, with overhead construction. Our power-house is at Lake View. We commenced running our cars November 24. At Lake View is situated Horn Lake, a natural lake about 10 miles long and from one-half to three-quarters of a mile wide. This is the only natural lake near Memphis, and is an outing place for her citizens. We own the property at Lake View, bordering on the lake, and it is our intention to make this an attractive summer resort. We have a franchise in the city of Memphis covering about seven miles of its streets, and upon these streets we now desire to build our line, so as to bring our passengers into the heart of the city. As it is, we are now transferring them to the Memphis Street Railway outside the city."

Pittsburg and Steel.

Significant of the confidence in the steel industry are the plans for the formation, under the auspices of the Crucible Steel Company of America, of the Pittsburg Crucible Steel Co., and, in that connection, for the purchase of the plant of the Midland Steel Co., below Beaver, Pa., and of 1800 acres of coal lands and 130 acres of limestone. According to a dispatch from Pittsburg announcing these plans, the property will be improved with plants sufficient to meet the requirements of the company as to the highest grade of open-hearth steel, and the plans involve the expenditure of $7,500,000. Very correctly this piece of enterprise is regarded as an evidence of faith in the persistence of the importance of Pittsburg as a steel center.

Machinery Dealers' Meeting.

The annual meetings of the Southern Supply & Machinery Dealers' Association, the National Supply & Machinery Dealers' Association and the American Supply & Machinery Manufacturers' Association will be held at Louisville, Ky., April 3-5, according to the announcement of Mr. F. D. Mitchell of New York, secretary-treasurer of the last named organization.

It is expected that the sewerage system of Baltimore, of which 160 miles of sewers are completed and under contract, with many sanitary laterals and the pumping station pactically completed, will be finished in 1914.

GOOD ROADS

WEEK'S HIGHWAY RECORD.

Progress in Southern Road and Street Improvement.

[Full details of highway undertakings are given in the Construction Department.]

Bonds Voted.

Kountze, Tex.—Hardin county voted $100,000 bond issue for road construction.

Bonds to Be Voted.

Germantown, Tenn.—City asked Legislature for authority to issue $3000 of bonds for street paving and electric-light plant.

Spartanburg, S. C.—City will ask Legislature for authority to issue $50,000 of bonds for street improvements and sewer system.

Contracts Awarded.

Augusta, Ga.—City awarded contracts for curbing, cement sidewalks and driveways that may be ordered by City Council during 1911.

New Orleans, La.—City awarded contract at about $18,000 for laying about 6000 yards of asphalt paving.

Newport, Tenn.—Cocke County Pike Commission awarded contract to grade about 18 miles and macadamize about 35 miles of roads; estimated cost $100,000.

Contracts to Be Awarded.

Aiken, S. C.—City will construct about 600x300 feet of vitrified brick pavement.

Aransas Pass, Tex.—City will improve streets.

Attalla, Ala.—City will lay sidewalks and sewers on Hughes avenue.

Austin, Tex.—Travis county contemplates expending about $2000 to repair and extend Manor road, about one and a half miles.

Dallas, Tex.—City will receive bids until February 6 for improving Hickory street.

Eral, Ark.—Good Roads Improvement Association will be organized to construct 70-mile road at an estimated cost of $2000 per mile.

Hugo, Okla.—City will expend $120,000 to construct two miles of pavement.

Louisville, Ky.—City will construct with granite a section of levee; cost will be $5000.

Louisville, Ky.—City will construct 4000 linear feet of asphalt pavement, 34 feet wide, with vitrified block gutters, at cost of $40,000.

Macon, Ga.—City will consider paving Vineville avenue.

New Albany, Miss.—Union County Road Commission will probably open bids in April for recently-announced improvements on about 300 miles of roads; county voted $50,000 for road improvements.

New Iberia, La.—City is considering street paving.

Newport News, Va.—Virginia Peninsular Good Roads Association was organized to promote the construction of 88 miles of sand-clay road from Hampton Roads to Richmond, and with various branches.

Norfolk, Va.—Bureau of Yards and Docks, Washington, will receive bids until February 11 for paving at navy-yard.

Norfolk, Va.—City received bids until January 28 for about 1800 square yards of paving and 1500 linear feet of curb setting on Denby street.

Oklahoma City, Okla.—City will receive bids until February 13 for sheet asphalt grading, etc., on Exchange avenue.

Portsmouth, Va.—State Highway Commissioner of Richmond will receive bids until February 6 for constrcting macadam roadway and extending a macadam roadway.

Spottsylvania, Va. — Spottsylvania County Public Road Commissioners will construct macadamized roads; distance of about one and a half miles.

HAMPTON ROADS—RICHMOND.

Great Highway Planned for Tidewater Virginia.

Chamber of Commerce,
Newport News, Va., January 30.

Editor Manufacturers Record:

I give you the following idea of what has been done, and what we propose to do, in the construction of a sand-clay road between Norfolk, Old Point, Newport News, and passing through Williamsburg on to Richmond.

This movement to build a highway was started by the Chamber of Commerce in Newport News about two months ago. The committee that had the matter in charge decided to have a general meeting of all those interested along the line of the proposed road. Williamsburg was selected as being the most central point at which to hold this meeting. Invitations were sent out to the Board of Supervisors of the different counties, the Commonwealth Attorneys and the Mayors of the different cities, asking them to send representatives, and also the different business organizations and automobile clubs along the line. The meeting was held at the courthouse in Williamsburg on January 24, at which nearly all of the different bodies and organizations that we asked were represented, there being about sixty-five persons. A complimentary luncheon was served at the Colonial Inn by the Newport News Chamber of Commerce.

After a temporary organization was effected, it was decided to have a permanent organization, to be known as The Virginia Peninsula Good Roads Association. The following officers were elected: Frank W. Darling, president, Hampton; H. T. Woods, first vice-president, Richmond; H. B. Goodridge, second vice-president, Norfolk; J. B. C. Spencer, third vice-president, Williamsburg; W. E. Cottrell, secretary, Newport News; George F. Adams, treasurer, Hotel Chamberlin, Old Point.

The following committees were decided upon: Two ferry committees, one from Norfolk and one from Newport News. These committees are to co-operate in getting a team and automobile ferry established between Newport News and Sewell's Point, connecting there with the Jamestown Boulevard, running into Norfolk.

A road committee was appointed, consisting of the Boards of Supervisors of the different counties through which the road passed, and one person from each district of each county, the chairman of each county committee to be a member of the executive committee, together with officers of the association, who are ex-officio members of this committee. This committee is to have charge of the actual construction of the road and carrying out of the plans of the association.

Mr. L. B. Manville of Newport News was appointed chairman of the executive committee. The president was authorized to appoint legislative, membership and publicity committees.

It was unanimously decided that the object of the association was to build a sand-clay road from Hampton Roads to Richmond, with branches from Williamsburg to Yorktown and Jamestown. The membership to the association was fixed at $1 per year, each member pledging himself to get as many members as he could, with the hopes of securing at least 1000. The meeting adjourned, subject to the call of the president.

Since this meeting was held the president has appointed the following persons as chairmen of the different county committees to be members of the executive committee:

W. R. Koch, East Richmond, Henrico county; J. E. Hubbard, Charles City, Charles City county; J. A. Potts, Barhamsville, New Kent county; T. H. Geddy, Williamsburg, James City county; G. L. Smith, Tabbs, York county; A. O. Curtis, Denbigh, Warwick county; M. C. Armstrong, Hampton, Elizabeth City county.

A meeting of the executive committee has been called for February 2 at the Warwick Hotel, in Newport News, the association paying the traveling expenses for the members of the executive committee, and the Hotel Warwick furnishing a complimentary luncheon.

The road has been platted about one-half the way and measured the entire distance. It is the plan of the executive committee to go before the different county authorities and request that they build their share of the road under the general supervision of the association. If it is found that sufficient available funds can't be secured from the county authorities, some plan will be devised by which enough money can be raised to complete the road, either by borrowing or through private subscriptions. It is hoped that the work will be started by April 1 and completed by September 1 of this year.

The road will pass through the following counties, and the mileage in each county will be as follows: Starting with Henrico county, 18 miles; New Kent county, 20 miles; James City county, 30 miles; York county, 15 miles; Warwick county, 5 miles; total, 88 miles from Newport News to Richmond.

At Newport News, at the mouth of the James river, it is proposed to establish a ferry across Hampton Roads, a distance of about four miles, to Sewell's Point, connecting there with the Jamestown Boulevard into Norfolk, a distance of about five miles. At Newport News the road will connect with the macadam road already completed running through Hampton, Phoebus and to Old Point, a distance of about seven miles. The road from Williamsburg to Jamestown Island, a distance of about seven miles, is two-thirds completed. The distance from Williamsburg to Yorktown is about nine miles. Of the 88 miles to be completed, about 30 miles are practically completed, and the rest of the road will have to be graded, bridged and the necessary material put on to make it a good road.

Starting at Richmond, the road will run through a rich farming country, which has great possibilities for development. It will also open up to people living inland the advantages of seaside resorts. It will also pass through a good gunning country, with the James river lying on the west and tributaries of the Chesapeake Bay on the east. Some of the best fowl shooting grounds on the eastern coast of the United States. It will also open up one of the most historical sections in this country.

On leaving Richmond it will pass by Seven Pines, the well known battlefield of the Civil War, and a short distance further on it will pass St. Peter's, the church where George Washington was married. It will also pass by Fair Oak, Bottoms Bridge and McClellan's earthworks, and along the Chickahominy river and the Custis estate. At Williamsburg there are many points of historical interest. Bruton Church, the Powder Horn, William and Mary College, the Debtor's Prison, the ruins of the old House of Burgesses, and other places of interest. Leaving Williamsburg we pass near Little Bethel, the scene of the first battle of the Civil War; then on to Newport News,

Hampton and Old Point Comfort. By ferry to Norfolk you pass over Hampton Roads and the spot where the Monitor and Merrimac fought. From Williamsburg to Jamestown Island, a distance of seven miles, we have one of the oldest settlements in this country. From Williamsburg to Yorktown, a distance of about nine miles, we have the spot where Cornwallis surrendered.

We are getting up figures as to the cost of the proposed road and hope to have them ready within a few days.

M. C. ARMSTRONG,

Chairman Committee on Streets, Roads and Parks.

FOR INTERURBAN SERVICE.

Growing Importance of the Automobile Line in Texas.

[Special Cor. Manufacturers Record.]

San Antonio, Tex., January 26.

Texas has taken the initiative in demonstrating the use of the automobile for interurban service. Already from Sonora, far out on the Western plains, for several years an automobile line has crossed the big divide to San Angelo and the railroad. At Fredericksburg, a little German town high up in the mountains, is an automobile line that runs over a high mountain to connect with the railroad to San Antonio.

Now comes the announcement of a new interurban automobile line from San Antonio to Sutherland Springs, 30 miles southeast of this city. There will be several round trips daily with big modern touring cars to connect this beautiful winter resort with San Antonio. It will be a popular trip with the tourists staying in this city to go out there and drink of the mineral waters, take the hot sulphur baths, as well as enjoy the trip through a beautiful country.

The result of this automobile development is a demand for better roads. It has educated the farmers to see the saving in having good roads, and road improvement and road-building is going on in nearly every community. While it is not generally known, it is a fact, nevertheless, that Texas will have one of the longest automobile roads in the United States when a few unfinished links are completed. This road will extend from Houston to Brownsville by the way of Corpus Christi, Kingsville and other intermediate points. Connecting with this at Corpus Christi will be another road to San Antonio. This will be completed during the coming summer.

With the completion of a few short stretches, another road will be continuous from the city to Laredo, 150 miles south. This auto way, when the unfinished links are completed, will be almost 1000 miles in length. But long as this is, it is but the beginning of auto roadways in Texas. Already a line stretching across the State from east to west is projected, and another from the Red River to the Gulf, crossing the State north and south. In no part of the country, perhaps, is the automobile playing such an important part in rapid transit as in Southwest Texas.

Bitumens and Roads.

The National Department of Agriculture has published a circular by Prevost Hubbard, chemist in the office of public roads, on bitumens and their essential constituents for road construction and maintenance, which presents in condensed form a description and discussion of various bituminous materials at present in use in road construction and maitnenance. The circular is designed to clear up a very general misunderstanding concerning the actual and comparative value of bituminous road materials.

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

GREENVILLE TO KNOXVILLE.

$6,000,000 Mortgage Filed to Carry Out a Long-Discussed Railroad Plan.

The Greenville & Knoxville Railway Co. has filed a mortgage for $6,000,000 at Greenville, S. C., the object of which is to fulfill the long-discussed plan of extending to Knoxville, Tenn., and it seems probable that entrance to the latter will be made over the Knoxville, Sevierville & Eastern Railway, which is in operation from Knoxville east to Sevierville, Tenn., about 26 miles. W. J. Oliver of Knoxville is the builder of the latter, and it will doubtless be remembered that several months ago the W. J. Oliver Construction Co. was incorporated in South Carolina for the purpose, it was rumored, of building the connection between the two railroads.

It will require the construction of about 125 miles of entirely new railroad through mountainous country to make a line from Greenville to Knoxville if connection with the Sevierville road is made; otherwise, about 150 miles or more will have to be built.

The route of the new line, according to a report from Greenville, will be from the present terminus of the Greenville & Knoxville at Riverview, S. C., to River Falls, and over the Saluda mountains. Continuing through Greenville county, it will traverse Henderson and Transylvania counties, North Carolina, passing Brevard, going then to Asheville, in Buncombe county, then through Haywood county via Canton, N. C., going thence along the Pigeon River Valley and through the Great Smoky mountains into Cocke county, Tennessee, and from there into Sevier county. The mortgage provides for bonds at the rate of $40,000 per mile. It will also take care of $325,000 of underlying bonds.

The Greenville & Knoxville Railway is at present of the same length as the line it is expected to connect with for Knoxville, namely, 26 miles. It is an old road, and during the last few years has been extended several miles. There are about five miles of completed grade without track beyond Riverview to River Falls, S. C. The proposed construction will require some heavy work.

W. H. Patterson of Atlanta, Ga., is president of the road. D. C. Patterson is secretary.

From Knoxville it is reported that survey has been made for an extension of the Tennessee end from that city to Harriman, Tenn., but as the Harriman & Eastern Railroad is already under construction with unknown backers, it may be that it is designed to be the connection, for it is headed toward Knoxville, about 35 miles, with 17 miles under contract.

One of the rumors in connection with the proposed line is that the Louisville & Nashville Railroad will be found interested in it.

If an extension to Harriman is part of the promoters' plans, it would appear that their object is to make a new line between the east and the west, for it would connect there with the Tennessee Central Railway, which is now independent, having been dropped by the Illinois Central and the Southern some time ago, and it might make a link in a trunk line as far west as Hopkinsville, Ky.

South Carolina Western.

The South Carolina Western Railway, which recently completed its line between McBee and Hartsville, S. C., has, according to a letter from Florence, S. C., very nearly completed grading for a further extension from Hartsville to Darlington, and survey has been made beyond the latter place to continue construction to Florence. It is about 15 miles from McBee to Hartsville, 15 miles from the latter to Darlington, and about 8 miles from there to Florence, which would make the entire road about 38 miles long. W. R. Bonsal of Hamlet, N. C., is building the road.

$1,000,000 FOR NEW WORK.

Lexington & Interurban Railways to Be Refinanced and Improved.

The Kentucky Securities Corporation, charter for which was recently obtained at Richmond, Va., has been formed, according to an official letter, to provide capital for the improvement and extension of the property of the Lexington & Interurban Railways Co., Lexington, Ky. The financial plan, providing for exchange of securities, has received the approval of a large majority of those interested in the Lexington & Interurban Railways Co., which is to be liquidated. Under the plan about $1,000,000 will be provided for the proposed improvement. The directors of the new corporation have approved the plan, and the Real Estate Trust Co. of Philadelphia has been authorized to exchange the securities on and after January 31. The corporation will have an authorized capital of $2,500,000 of 6 per cent. preferred stock, of which it is proposed to immediately issue $2,160,240. This stock is cumulative after January 1, 1913. There is also $2,500,000 of common stock authorized, of which $2,053,100 it is proposed to issue immediately. The directors are Caldwell Hardy of Norfolk, Va.; J. A. McCarthy, Howard A. Loeb and Percy M. Chandler, all of Philadelphia, Pa.; Gustavus W. Cook of Lansdowne, Pa., and T. B. Gay of Richmond, Va.

The Lexington & Interurban Railways Co. has about 97½ miles of track operated between Lexington, Frankfort, Georgetown, Paris, Nicholasville and Versailles, Ky. It also operates the city lines of Frankfort. In addition to the street railway business, it conducts the city light and ice business at Lexington. The properties under its control are the Bluegrass Traction Co., having 12 miles of track from Georgetown to Lexington and 18 miles from Lexington to Paris; the Lexington Railway, having 15½ miles of track at Lexington; the Lexington Utilities Co., which conducts the electric-light and ice business, and the Central Kentucky Traction Co., which has 28 miles of line from Lexington to Frankfort. The latter also has franchises to build from Frankfort to Lawrenceburg, about 15 miles; Frankfort to Shelbyville, about 25 miles; Frankfort to Owenton, about 30 miles; Paris to Cynthiana, about 15 miles; Nicholasville to Danville, about 20 miles; Nicholasville to Harrodsburg, about 18 miles; Lancaster to Danville, about 12 miles; Harrodsburg to Danville, about 10 miles, and Winchester to Mt. Sterling, about 13 miles. There are altogether about 125 cars on the track now operated.

The present officers of the Lexington & Interurban are J. Levering Jones, president; John Blair MacAfee, vice-president; H. Delaney, treasurer, and Henry Rainey, secretary, all of Philadelphia. The general office is at Lexington, Ky.

PIEDMONT INTERURBAN.

Money Liberally Subscribed to the Railroad Promoted by the Dukes.

Charlotte, N. C., has raised her entire subscription of $300,000 to the stock of the $7,000,000 interurban railway which J. B. and B. N. Duke and their associates propose to build between that city and other cotton-mill cities and towns in the Piedmont Carolinas. Pledges to give at least half of their shipments to the proposed railway were freely signed by merchants and mill men, and it is said that the expectations of the promoters in this respect were more than realized.

At Spartanburg, S. C., the promoters asked for $250,000, and immediately $115,000 was raised. Then a committee was appointed to canvass for the balance, with perfect confidence that it would all be secured.

Other places in South Carolina which have been asked to subscribe are Greenville, Anderson and Greenwood. The latter will be the Southern terminus.

A report from Durham, N. C., quotes B. N. Duke as saying that after the line from Charlotte to Anderson is constructed a line will be built from Charlotte to Durham. Plans for the latter will be taken up as soon as plans for the larger road are finished.

PENSACOLA TO MEMPHIS.

Application for Franchise Pending; Also Another Line Into Alabama.

P. D. Dumont of New York has applied at Pensacola for a franchise to build two railroads, one to be known as the Pensacola, Alabama & Western and the other as the Pensacola & Northeastern. His arguments were presented at a special meeting of the City Council, after which an ordinance was introduced to grant the franchise, provided that 60 miles of line on one road shall be built within a year, and that the entire line of 150 miles shall be completed within 18 months; also that the road to Memphis, Tenn., shall be completed in four years. The franchise must be accepted within 45 days. The ordinance was referred to the franchise committee.

The shorter of the two roads will extend from Pensacola to Andalusia, Ala., which is on the Central of Georgia Railway, and the longer will run northwest to Memphis. The latter, it is claimed, would make a very short route between Memphis and Pensacola, and the promoters are quoted as saying that they can begin actual construction within three months. It is understood that Mr. Dumont claims that the panic of several years ago was the cause of forfeiture of the franchise, which was granted to him before then. It is alleged that he represents a capitalist who has at least $27,000,000 at his command for the enterprise.

New Equipment, Rails, Etc.

The Mobile Portland Cement & Coal Co., St. Stephens, Ala., will purchase one locomotive of 40 tons, one gasoline car of 12 passengers capacity and 12 side-dump cars, 10 yards each.

The El Paso & Southwestern Railway, says a market report, has ordered 11 cars from the Pullman Company, Chicago.

The Western Maryland rail order was distributed as follows: 10,000 tons to the Carnegie Steel Co., Pittsburg; 10,000 tons to the Bethlehem (Pa.) Steel Co., and about 2000 tons to the Maryland Steel Co., Sparrows Point, Md.

The Chesapeake & Ohio Railway is reported to have ordered eight Pacific type and two eight-wheel type locomotives from the American Locomotive Co., New York; also 25 passenger coaches from the Pullman Company, Chicago.

The Missouri Pacific Railway is reported in the market for 75 locomotives.

The American Refrigerating Transit Co. of St. Louis is reported getting prices to purchase 1000 refrigerator cars.

The Brinson Railway, says a report from Savannah, Ga., has ordered three locomotives from the Baldwin Works, be-

sides 50 box cars, two passenger coaches and two combination cars from other manufacturers.

The Tennessee Packing & Stockyards Co., Nashville, Tenn., says a market report, has awarded contract for 25 refrigerator cars.

The Texas City Refining Co. of Galveston, Tex., has purchased from W. A. Guyton & Co. 80 oil tank cars of 10,000 gallons capacity each.

The Northern Texas Traction Co., says a dispatch from Fort Worth, Tex., will purchase 10 cars for use in that city.

The Missouri Pacific Railway, it is reported, has ordered 1000 steel hopper cars and 1000 refrigerator cars from the American Car & Foundry Co. of St. Louis.

The Macon (Ga.) Railway & Light Co. has received six pay-as-you-enter cars, the first of that kind in Macon.

The Carolina, Clinchfield & Ohio Railway, says a letter, has ordered 530 tons of 85-pound open-hearth steel rails from the Tennessee Coal, Iron & Railroad Co., Birmingham, Ala.

The Southern Pacific Railway, says a market report, has received two all-steel gasoline motor cars from the McKeen Motor Car Co., Omaha, Neb.

Tennessee, Alabama & Georgia.

The Tennessee, Alabama & Georgia Railroad Co., according to a report quoting an official notice, has been organized under the charter previously reported to consolidate the Chattanooga Southern Railroad, the Chattanooga & Atlanta Railroad and the Gadsden & Birmingham Railroad on February 1. The last two lines mentioned are yet to be constructed, but the consolidation plan is in accordance with previous announcements that the existing Chattanooga Southern and its proposed branches would be merged as one company. The officers are those of the Chattanooga Southern, of which Newman Erb is president; Henry W. De Forest, vice-president, both of New York; E. F. Blomeyer, vice-president and general manager, Chattanooga, Tenn.; H. B. Blanchard, secretary and treasurer, New York; C. M. Goldbaum, assistant treasurer, Chattanooga.

Railroad to Cement Mills.

The Mobile Portland Cement & Coal Co., says an official letter, will build a railroad from Prestwick, Ala., on the Southern Railway, via St. Stephens, where the company is located, to Pelhams Landing, on the Tombigbee River, the location of cement mills. There will be seven trestles, from 175 to 350 feet long, and of wooden construction. The route lies through very hilly country, the hills being sandy. The company's forces will do construction, which will be completed in about three months. The line will be used to convey machinery to the mill site during construction, and later for outgoing shipments of cement, crushed rock and other building material. Francis L. Robbins of Pittsburg, Pa., is president. O. Gerlach is general manager at St. Stephens, Ala.

Texico-Farwell to Pecos.

It is reported from Texico, N. M., that M. J. Healy, promoter and president of the Rock Island, Texico-Farwell & Southern Railway Co., which projects a line from Texico-Farwell (two adjoining towns, one on the New Mexico and the other on the Texas side of the Texas-New Mexico boundary) to a Texas & Pacific Railway connection at Pecos, Tex., has sold his entire interests in the new road to others interested, and that the stockholders have elected D. A. Linthicum, president of the Farwell National Bank, to be president of the road. It is expected that the construction will be pushed rapidly, and that the Knowles (N. M.) connection should be made within the next eight or twelve months, as 29 miles are already completed between Farwell and Knowles, and steel is ready to lay. Graders are working at Knowles, and the engineers are surveying into Pecos, about 260 miles from the starting point.

The road will pass through a section of West Texas and East New Mexico which has shown very rapid growth agriculturally within the past few years.

East Coast's Okeechobee Line.

Wright & Wadley of Macon, Ga., says a report, have been awarded an extensive contract on the important extension of the Florida East Coast Railway, which is to be made from Maytown, on the Titusville division, to Lake Okeechobee, about 130 miles, with a branch from Whittier, Fla., to Fort Bassenger, about 30 miles. The general contractor, as heretofore reported, is the Kissimmee Valley Construction Co. L. R. Wright is quoted as saying that forces have already started for the scene of operations, and the line is to be completed within 18 months. Work will begin at Maytown. The contract covers grading, trestles and bridges and tracklaying. The route is very level, and little grade work will be necessary.

The Mobile-Pensacola Road.

A report from Mobile, Ala., says that the Pensacola, Mobile & New Orleans Railroad, which is being built by Henry McLaughlin of Pensacola and others, will make its western terminus at Park City, Ala., on the eastern shore of Mobile Bay, until the line across the lowlands to Mobile, which will require the erection of considerable trestle and bridge work, can be built. At Park City, which is two miles north of Daphne, Ala., a little town is springing up, and it is expected that the track will be laid to that point late in March or early in April. The grading has been completed to a point three miles from Park City, and will soon be finished. The bridging will demand some concrete work.

Virginian Railway's Report.

A report from New York says that the first annual report of the Virginian Railway Co., which covers the fiscal year ended June 30 last, shows gross earnings, $2,063,190; net earnings, $610,066; total income, $690,496; fixed charges and taxes, $2,371,963; deficit, $1,691,467. It is noted that one reason for the small earnings of the company was lack of equipment, but after the beginning of the current fiscal year, when additional equipment was put in service, the first four months showed earnings of nearly double as compared with the corresponding period of 1909. The total assets of the company are $78,386,562, which includes the road and equipment at $75,416,694.

Pecos & Northeastern.

A letter from Pecos, Tex., says that the Pecos Valley & Northeastern Railroad Co., which is probably designed for an extension of (or is allied with) the Pecos Valley Southern, proposes to build on to Alpine and Boquillas, traversing the neighborhood of Rocilla. The Pecos Valley Southern, it is said, has declared an intention to build to Alpine to connect with the Southern Pacific Railway and the Kansas City, Mexico & Orient Railway. The northern terminus of the Pecos Valley Northeastern is Wichita, Kans. W. L. Carwile, Dallas, Tex., may be able to give information concerning the project. He is president of the Pecos Valley Southern.

Aransas Terminal Railway.

An officer of the Aransas Terminal Railway, Aransas Pass, Tex., is quoted as saying that grading there is about 60 per cent. finished. Track has been laid on 3000 feet of line, and the drawbridges have been received ready for putting in place. There is a trestle about three-quarters of a mile long. The line runs southeast along the channel of the Aransas Pass Channel & Dock Co. to a point on the east side of Harbor Island, where there is deep water. E. O. Burton, Gibbs Building, San Antonio, Tex., is president of the company, and C. S. Corrigan of Aransas Pass is chief engineer.

Telephones on the C. & O.

The Chesapeake & Ohio Railway has now a complete telephone dispatching system over 545 miles of line from Richmond, Va., to Cincinnati, O., via the James River route, there having been recently equipped two more divisions, and it will not be long ere the telephone is used all the way from Fortress Monroe to Cincinnati, as work is being rushed between Richmond and the Chesapeake Bay. With other of its lines to be equipped, the road when all is done will have 902 miles operated with telephone equipment, which is furnished by the Western Electric Co.

Railroad Notes.

The Columbus (Ga.) Street Railway, says a report, is laying on a mile or so of track some 60-pound steel rails in place of 45-pound rails removed. This will give heavy rails on 15 miles out of a total of 20 miles.

The Baltimore & Ohio Railroad is reported to have completed second track thus: Benton Ferry, W. Va., to Gaston Junction, three miles; Valley Falls to Powell, three miles; also across the bridge at the Monongahela River.

A dispatch from Pittsburg says that the Union Trust Co. of that city has bought $5,000,000 of 4 per cent. 50-year gold bonds issued by the Winston-Salem Southbound Railway Co., which recently completed its line from Winston-Salem to Wadesboro, N. C.

L. N. Downs of New York and Hugh L. Kirby of Harpers Ferry, W. Va., who are interested in the Hagerstown & Clearspring Railway Co. at Hagerstown, Md., are also reported contemplating the establishment of trackless trolley lines between Williamsport, Md., Harpers Ferry and other points. The Clearspring Railway is yet to be built.

A report from Kansas City, Mo., says that the Strang electric line, running from Kansas City to Olathe, Kans., has been purchased by the interests headed by Wm. B. McKinley of Champaign, Ill., who already own the Topeka (Kans.) street-car line. The Strang road is 22 miles long. It is rumored that a line will be connected up from Kansas City to Topeka.

The Ocilla Southern Railroad, says a report from Ocilla, Ga., has obtained trackage rights over the Fitzgerald, Ocilla & Broxton Railroad between Ocilla and Fitzgerald and Irwinsville, which will enable it to give service to connect with the Atlantic Coast Line at Alapaha, Ga., and also wih the Atlanta, Birmingham & Atlantic Railway at Fitzgerald, Ga. J. A. J. Henderson is president of the Ocilla Southern.

A dispatch from Harrisville, W. Va., says that the property of the Harrisville & Cornwallis Railway Co. will be sold at auction on February 11. The construction of this road was started several years ago to connect Harrisville with the Baltimore & Ohio Railroad at Cornwallis, six miles away, but after some work was done construction ceased. Whether the sale will be followed by a resumption of work remains to be seen.

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

MARKETING COTTON GOODS.

Suggestions as to the Policy for Manufacturers.

Editor Manufacturers Record:

I have recently read in your issue of December 22 a number of letters from Southern cotton manufacturers on the methods of marketing their goods. In my opinion, the letter of Mr. J. E. Williamson comes nearest the point in question.

My experience suggests that every mill should have sufficient working capital or credit to enable it to carry its own goods independently of the commission man. Hold most of the goods at the mill and carry a small stock only in the hands of commission merchants at distributing points. If the mill is without sufficient working capital it should devote its profits to accumulate one as early as possible, so as to be independent of the commission man and be able to dictate its own prices, governed by a knowledge of the market, obtained, it may be, through a reliable commission house, but with the deciding vote resting with the mill. Any mill that has to depend wholly on a commission house for advances on both sales and goods carried in stock for money with which to continue operations is bound to come to grief sooner or later. There have been many instances of this. I would consider it of doubtful wisdom also to give the commission man an interest in the mill's profits. It would be apt to give him too much influence in the matter of sales, in which, I think, the mill should be independent.

There was a time when, in soliciting subscriptions to capital stock, the selling account would be promised to a commission house subscribing to the stock, and in some cases this may have worked well, and there are no doubt many commission houses having a divided interest as above who do equal justice to both. I say nothing against the commission merchant. He answers a very useful and valuable purpose, and in the majority of cases is indispensable, but from the manufacturer's standpoint it is desirable for the mill to be in a great measure independent of him.

Another thing, the mill should not consign the same class of goods, as is sometimes done, to two different parties in the same market, or markets which are likely to interfere with each other. It causes undue competition, which is ruinous to prices, as it makes little difference to the commission man in his commission whether he gets a quarter of a cent per yard more or less, and even if he is a stockholder, he is most likely to consider his commission first. The fact is, under customs governing the trade for many years of selling through an agent, the mills have got too much into the hands of middlemen, owing, I think, in most cases to the manufacturers having insufficient working capital and an imperfect knowledge of the markets. This may be remedied by the course suggested, more capital, so as to be independent of advances from commission men, and a close study of market conditions, so as to be able to judge as to prices and to control them as to your own products. P. L.

Baltimore, January 25.

The Cotton Movement.

In his report for January 27 Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 149 days of the present season was 9,356,973 bales, an increase over the same period last year of 1,404,789 bales. The exports

were 5,327,626 bales, an increase of 1,203,476 bales. The takings were, by Northern spinners, 1,445,515 bales, an increase of 24,594 bales; by Southern spinners, 1,157,321 bales, a decrease of 11,346 bales.

The O. A. Robbins Mill.

O. A. Robbins of Charlotte, N. C.; Geo. W. Montcastle and others of Lexington, N. C., and Fall River (Mass.) capitalists have determined on Lexington as the location of their proposed mill mentioned in December. They will organize a company with a capital stock of $500,000 and build a mill for manufacturing a fine grade of cloth not heretofore made in the South. The initial equipment will be 20,000 spindles and 400 looms. Other details are now being determined.

Wants Plans for Building.

Dancey Fort of Clarksville, Tenn., invites plans and specifications for a dormitory, chapel and school building to cost about $20,000. This building is proposed by the Odd Fellows.

Textile Notes.

The Paris Progressive Club of Paris, Tex., contemplates arranging for the erection of a cotton mill.

The Cleghorn Mills Co. of Rutherfordton, N. C., will increase capital stock by $25,000 to purchase new machinery. This company now has 6240 ring spindles, 3014 twister spindles, etc.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER AT ASHEVILLE.

Expansion of Forest Operations in That Region.

[Special Cor. Manufacturers Record.]

Asheville, N. C., January 21.

The ingress of any industry and its growth to a point where it must be considered as a large factor in the development of any locality is so gradual that great changes take place before the general public is aware that such a change is occurring. The fact that such a state of affairs is being brought about by the advent of developments in the lumber business in the Appalachian mountain region is little appreciated, but the fact remains that the trend of movement of large lumber operations is toward this section, and the next one or two years will see a great transformation in industrial activities in this section.

The purchase of timber and the erection of the large plant of the Champion Fiber Co. at Canton, N. C., some two years ago perhaps marked the first important phase of the onward march of development. Since that time the purchases of timber and other moves toward development of these properties made by large operators in the lumber business have been numerous. On all sides large mill plants are being erected, logging railroads being laid out or under course of construction, and general plans for extensive operation being made. While many of these movements have been noted in the columns of the MANUFACTURERS RECORD, and in the lumber trade journals, the effect of these notices on our minds is not cumulative, and we do not sufficiently foresee the resulting changes, in an industrial way, which will be brought about by the movement of which this is the first wave.

Lumbermen are gregarious; they move together, and they develop one section of the country at a time. When the supply of timber in any section of the country becomes thinned, the advance guard, or more progressive, go ahead, and, looking about the country, select that section where they can obtain the best value for their money, then others follow like sheep.

Three years from now, perhaps less, that section of the country of which Asheville, N. C., is the center will be one beehive of lumbering operations, and such timber as can then be purchased will be worth many times its present valuation.

Asheville is already the seat of the main offices of the majority of those lumber corporations which have already located in this field, and each month sees some new concern added to the list. The hotels are never without some lumbermen, visiting this section and looking over the ground; the timber cruisers and engineers are constantly kept busy, and to good result. What is the reason for all this activity?

From the best statistics available, we learn that the total amount of timber standing in this United States today does not exceed 1,500,000,000,000 feet. Our population is increasing, and so also is the demand for lumber and other forest products, and the increase in their value has had no effect in lessening the demand.

Asheville, N. C., will be the center of one of the greatest of the hardwood markets, as Memphis, Tenn., has been for the past seevral years. The Appalachian mountain range is still almost an unbroken hardwood forest, and its mountain crests contain great supplies of spruce.

With railroad lines, now building and projected, running into the mountains in every direction and passing through the operations of large lumber companies everywhere, we shall see a great growth in commercial activity in all lines. These lumber mills will dispense large payrolls and furnish employment to many hands, and every branch of business will receive its share of the general prosperity which must follow, and especially will this be true of this section more than of any lumber center of the past, because the forest products of the present are bringing, and in the future will continue to bring, many times the return in dollars than they have brought in the past.

G. E. H. SKINNER.

Purchased 115,000 Acres.

R. L. Dowling of Ocala, Fla., telegraphs the MANUFACTURERS RECORD that he and T. W. Shands of Gainesville, Fla., have purchased 115,000 acres of timber land in Clay county, on the St. Johns River, Florida. They expect to turpentine the timber, but have no plans for manufacturing lumber in the near future.

Wants Yellow Pine Lumber.

The Joliet Bridge & Iron Co., Randolph Building, Memphis, Tenn., is in the market for a carload of long leaf yellow pine lumber, all heart.

Tampa.

Tampa, Fla., through its Board of Trade, W. B. Powell, secretary, is determined to overcome any obstacle that may present itself. After a six months' strike of the cigarmakers of that city, at a loss to them estimated at $300,000 a week, Secretary Powell in a letter to Florida editors says:

"Yet Tampa went right on, a little crippleed, but game to the last, and rounded out the year with per cent. increases in everything except the cigar industry, internal revenue and customs."

The calling off of the strike coincides with the issue by the Board of Trade of "Tampa Truisms," setting forth in detail the progress made in various lines. New corporations of 1910 for the city represent an aggregate capital of $2,670,000, and 1,120,384 tons of phosphate rock were shipped.

MINING

Southern Gold and Silver.

According to a report by H. D. McCaskey of the United States Geological Survey, Alabama in 1909 produced 1414.44 fine ounces of gold, valued at $29,239, and 212 fine ounces of silver, valued at $110, a decrease from the production of 1908 of 579 fine ounces of gold, valued at $11,969, and of 70 fine ounces of silver, valued at $39, the total decrease being valued at $12,008. No copper ores or cupriferous pyrite ores were mined in Alabama in 1909.

The gold and silver produced in Alabama in 1909 were derived from two deep and several small placer mines, the total value of the production from placers being only $69. The average recovered value from the deep mines in 1909 was $2.96 per ton of ore treated. The total quantity of ore treated in Alabama in 1909 was 9886 short tons. The production was derived almost wholly from the Hog Mountain mine of the Hillabee Mining Co., in Tallapoosa county, as it has been for several years past. This mine became the largest gold producer in the Eastern States in 1909. A small production was also reported from the Warwick mines, near Talladega, in Talladega county, in 1909.

The Gold Ridge Mining Co. reported only development work in 1909 at its mines in Cleburne and Randolph counties, near Hightower. No production was reported from the pyrite mines near Pyriton, whose ores furnish small amounts of copper as a by-product.

In 1909 the production of gold in Georgia was 2932.49 fine ounces, valued at $60,620, and the production of silver was 202 fine ounces, valued at $105, a total of $60,725, and an increase over the output for 1908 of 213.48 fine ounces in quantity and of $4413 in value of gold and of 2 fine ounces of silver. No copper or lead was produced in Georgia in 1909, the only mine yielding these metals having been closed throughout the year. The production of gold from placers in 1909 was 794.95 fine ounces and of silver 67 fine ounces. The remainder of the output of precious metals, 2137.54 fine ounces of gold and 135 fine ounces of silver, was all derived from siliceous ores, of which 8549 short tons were mined, yielding an average extraction valued at $5.18 per ton, as against $7.28 in 1908. There were 29 mines operated during the year, of which 15 were placers and 14 were deep mines. There was a considerable increase of placer production in 1909 over that of 1908 and a slight decrease in output of metal and an increase in tonnage mined and treated from deep mines.

The gold produced in North Carolina in 1909 was valued at $40,230, the silver at $259 and the copper at $29,186, a total value of gold, silver and copper for the year of $69,675. No important production of lead or zinc has been reported from North Carolina for many years. The output of gold in 1909 was 11,946.13 fine ounces, a decrease from that of 1908 of 2770.19 fine ounces in quantity and of $57,265 in value. Of silver, the production was only 499 fine ounces, valued at $259, but the production of copper was 224,512 pounds. A decrease is therefore shown of 409 fine ounces of silver and an increase of 205,119 pounds of copper. The total decrease in value of the production of the three metals named amounted to $31,048, or 35 per cent., as compared with the corresponding value for 1908. The increase in value of the copper produced, however, was more than tenfold. North Carolina lost first place in the Eastern States to Georgia in the production of gold in 1909.

In 1909 there were 18 placer mines in operation in North Carolina, or 8 less than in 1908, and the number of deep mines was reduced from 16 to 15, the total number of producing mines being 33. The total quantity of ore raised from deep mines was 7271 short tons, of which 3696 tons were siliceous gold ores and 3575 tons were copper ores, which shows a great decrease in gold mining, but an important increase in copper ore mined.

The production of South Carolina in 1909, as compared with that of 1908, showed a decrease of 2063.77 fine ounces in quantity and of $42,662 in value of gold, of 182 fine ounces in quantity and of $97 in value of silver, and of 1600 pounds in quantity and of $211 in value of copper. The total production of gold was 534.68 fine ounces, valued at $11,053; the output of silver was 44 fine ounces, valued at $23, and there was no production of copper. The value of the total production for 1909 was $11,076, as compared with $54,046 for 1908. The production reported for 1909 was from six placers and five deep mines. During 1908 there were two placer and five deep mines reporting production.

There were more producers of gold in 1909 than in either 1908 or 1907. The tonnage from deep mines decreased greatly, however, from that of preceding years, and the average extraction value decreased nine cents per ton from that of 1908.

In 1909 the production of gold, silver, copper and zinc in Tennessee was valued at $2,595,350. As compared with the corresponding figures for 1908, this shows a decrease in value of $39,925. The output of gold was 199.21 fine ounces, valued at $4118; of silver 57,637 fine ounces, valued at $29,971; of copper 19,206,806 pounds, valued at $2,496,885, and of zinc 1,192,161 pounds, valued at $64,376. The gold output, which has been very small in Tennessee, was slightly higher than in 1908. The production of silver was decreased by only 59 fine ounces in quantity, but by $608 in value, owing to the decreased market price of this metal. The copper output showed a decrease of over 250,000 pounds in quantity and of $71,769 in value. The zinc output in 1909 was nearly twice as large as that of 1908, and about six times that of 1907.

The decrease in total tonnage mined was 27,019 short tons, being the difference between a decrease of 42,126 tons of copper ore mined, as compared with the output of 1908, and an increase of 15,107 tons of zinc ore. The total tonnage for 1909 was 611,014 short tons, of which 576,680 tons were copper ore and 34,336 tons were zinc ore. The average recovered copper content of copper ore increased from 31.4 pounds per ton of ore in 1908 to 33.3 pounds in 1909. The corresponding zinc content decreased from 35.8 to 34.6 pounds per ton.

In 1909 the value of the production of gold, silver, copper and zinc in Virginia was $41,698, a decrease of $33,663 from that of 1908. The production of gold was 181.41 fine ounces, valued at $3750, an increase of 62.84 fine ounces in quantity and of $1299 in value, as compared with the corresponding figures for 1908. The production of silver was 4825 fine ounces, valued at $2509, an increase in quantity of 4589 fine ounces, and in value of $2384, and the production of copper was 224,162 pounds, valued at $29,141, an increase of 199,387 pounds in quantity and of $25,871 in value. There was no output of lead or zinc reported from the mines of this State in 1908, and the production recorded is to be credited to reworking of old dumps. There were four placers and three deep

mines producing in 1909, and from the deep mines were reported 14,075 tons of ore, of which 250 tons were of siliceous gold ore yielding precious metal with an average value of $2.09 per ton, and 13,825 tons were of copper ores and pyrite cinder yielding 35 cents in precious metals and 16.2 pounds of copper per ton.

To Develop 700 Acres.

The Rock Springs Coal Co. of Knoxville, Tenn., has organized with a capital stock of $150,000 to develop a 700-acre tract of coal land at Turley, Tenn., 44 miles north of Knoxville. This property will be equipped with an electrical haulage plant for a daily capacity of 1000 tons of coal, and the construction of 40 tenement-houses for the miners has already begun. The land is said to contain a 5½-foot vein of domestic coal. The company's officers are: R. E. Miller, president; Alvin W. Jones, vice-president; John J. Keiley, secretary-treasurer, all of Knoxville.

Purchased Kentucky Coal Properties.

Messrs. S. J. Gish and W. D. McIlhenny of Central City, Ky., telegraph the MANUFACTURERS RECORD that they have purchased 123,000 acres of Kentucky coal land, with 42 mines having an annual output of 4,700,000 tons of coal. The purchasers are not as yet prepared to announce their plans for further developments, but it is understood that the present plants will be continued with a view to largely increasing production during the year.

Coal in Texas.

A dispatch from San Antonio says that in an address in that city C. S. Fowler stated he has been making investigations and has discovered that within 20 miles of San Antonio enough bituminous coal to supply the entire United States for 500 years. It was maintained by him that this can be mined so cheaply that it will serve as an inducement to manufacturers of all kinds to locate there. Along with the coal are vast deposits of lignite, which he declares can be mined and sold at $1.50 per ton.

To Develop Phosphate Lands.

E. B. Blackman of Tullahoma, Tenn., is planning to develop 3280 acres of phosphate land near Tullahoma. He has not formed a company, but is planning to have the property mined, and expects that work will be begun at an early date. Mr. Blackman states that the land averages from 72 to 78 per cent. phosphate.

FOREIGN NEEDS

Machinery and equipment wanted abroad are mentioned in many letters received by the MANUFACTURERS RECORD, which is so widely read in foreign countries that we are in constant receipt of many letters from all parts of the world. For the benefit of our subscribers seeking foreign trade we publish the following extracts from recent letters:

Products Wanted for Egypt.

I. Setton & Co., P. O. Box 888, Cairo, Egypt, write the MANUFACTURERS RECORD:

"The Egyptian market is steadily improving. Every year numbers of articles are imported from nearly the five parts of the world. Many of same are imported from America, but a good many, too, are not, and which, to our opinion, would find a ready market, leaving at the same time a good profit, in spite of the high rates of transport. We may mention, for instance, copper, cement, chemical products, bar tin, tinplate, and nearly all articles of foundry.

"Copper.—This line is imported from both England and Germany, the greatest part from England; never from America.

"Cement.—Same is imported from Belgica, England and Germany.

"Chemical Products.—Germany and England.

"Bar Tin.—England and Italy.

"Tinplate.—England only.

"Foundry. — Only nails are imported from America, but nothing else, such as construction materials, etc., which are imported from Belgica and Germany.

"We shall be glad if you would be kind enough to recommend us some good firms for any of the above articles, and particularly nails, so that we may represent in our community, and feel sure we can make very important business."

Ornament-Pressing Machinery.

Post van der Burg & Co., Rotterdam, Holland, write the MANUFACTURERS RECORD:

"The object of the present is to inform you that we have an inquiry for a machine for pressing ornaments 120x80 millimeters into the backs of chairs, and take the liberty to ask you whether you can name us reliable makers for such."

Spinning Machinery and Railway Specialties.

N. S. Haim 69 Mark Lane, London, England, writes the MANUFACTURERS RECORD:

"At present I can only specify two lines which I venture to believe to be in a position to handle. I should say fiber or wire-spinning machinery, or machinery of any kind or some new invention of interest to railway companies."

Cotton-Ginning Machinery.

Robert Frohn Sohn, Remscheid, Germany, writes the MANUFACTURERS RECORD:

"At present I am interested for prices and catalogues for cotton-gin machinery for export, and would be obliged to you for some good offers of good manufacturers."

New Veneer Plant.

The advantage to be gained in the way of reducing insurance expenses and the risks of fire in shutting down the working plant is illustrated in the new buildings of the Bacon-Underwood Veneer Co. at Stockton, Baldwin county, Alabama. The location of this mill brings it in the Mobile industrial zone, and it is distinctive from the fact that it is being constructed wholly of reinforced concrete. The plant is rapidly approaching completion, the mill being a two-story structure 80x125 feet, with steam vats and boiler-room adjoining. The engine is on the ground floor, also the log-haul machinery, the cross-cut saw and the dust and waste carrier. On the second floor, which is on the level of the tops of the steaming vats, are the veneer knives and trimmers. The greater part of the machinery is located on the ground floor, and much of it is now in place. The saw-mills and woodworking mills have been made simply of wood and brick.

Three drykilns are under construction, and also a packing and shipping house. The kilns have the forms in place, and the packing-house is nearing completion, all being made of reinforced concrete, each building 100x150 feet.

The mill will make veneers in several thicknesses, and will make its shipments through Mobile.

The officers of the company are Arthur W. Underwood of Chicago, president; John McMillan of Stockton, vice-president and manager; R. S. Bacon, treasurer, and W. L. Whiting of Mobile, secretary.

MECHANICAL

To Build Diesel Engines.

A plan for the larger manufacture of the well-known Diesel engine has been instituted by the incorporation of the Busch-Sulzer Bros.-Diesel Engine Co., with a capitalization of $2,100,000. This company will make and sell the Diesel oil engine in America, the American possessions, Panama and Canada, under the exclusive right to all the Diesel inventions and patents, both existing and those that may exist in future. The licensees in Switzerland, the Sulzer Bros., who have brought the Diesel engine to a point of supremacy abroad, are associated with the American company, and will bring to it such inventions and improvements as they have made, with all their manufacturing experience. The Busch-Sulzer Bros.-Diesel Engine Co. is thus equipped by patents and manufacturing experience to place before power users one of the finest productions in the way of an internal-combustion engine, already largely used. The engine works will be built at an estimated cost of $1,000,000, and will employ 500 men at first. Adolphus Busch of St. Louis will be president; August A. Busch of St. Louis will be first vice-president; J. R. Harris of St. Louis will be second vice-president and general manager. The directors will be these officers and E. A. Faust of St. Louis, E. D. Meier of New York, president of the American Society of Mechanical Engineers; Eugene Angert and Daniel N. Kirby of St. Louis, Rudolph Diesel of Munich, Germany, inventor of the Diesel engine, and Robert Sulzer of Sulzer Bros. of Winterthur, Switzerland. Eleven men will comprise the board, two to be selected later. Max Rotter, at present chief engineer with the Allis-Chalmers Company of Milwaukee, has been engaged as the chief engineer of the new company, and will assume his duties as soon as arrangements can be made to secure his release. The directors and officers will be elected at the first stockholders' meeting, on February 2. The location of the works has not been determined, but Adolphus Busch naturally favors establishing the plant in St. Louis, that being his residence. Following organization the subject of plant will be carefully considered, and if no disadvantages, such as labor problems, etc., are apparent, it is quite possible St. Louis will get the plant. The situation, of course, will be canvassed thoroughly before the decision is made. Among the patents acquired are those which cover two and four-cycle engines, both marine and stationary types. Adolphus Busch has been interested in the Diesel engine since 1897, when he purchased the basic patents for the United States and Canada, although the engine had just been invented. He invested largely in the American Diesel Engine Co., and in May, 1909, purchased its assets and removed the business to St. Louis, where it has been managed by James R. Harris. It is stated that engines for over 11,000 horse-power were sold by Mr. Busch during the past 16 months, and more could have been sold if facilities for manufacturing had been greater.

The Diesel engine is an internal oil combustion engine, and is built both as a two-cycle and as a four-cycle engine. Ordinary crude oil is used for fuel, and the method by which this fuel is used in connection with the engine is both simple and radically different from that of other types of power. There are no boilers, neither is the fuel used as is gasoline in the automobile engine, although the operation in the latter case is somewhat similar. In the Diesel method of combustion, however, there is no annoying "mixture," neither is there any "spark" or other mechanical or electrical device to cause trouble. The cylinders of the engine (in which the power is developed and applied through the pistons and rods to the driving shaft) contain nothing but air until the "compression" stroke has been completed and until the temperature which results from this compression is more than sufficient to ignite the fuel. The fuel is atomized by air into an extremely fine spray, and is introduced into the cylinder at a rate which does not permit of an explosion, but generates a steady pressure on the piston as does the steam in a steam engine, the quantity being regulated directly by the governor in proportion to the load on the engine.

Electric Processes Applied to Iron and Steel.

The development of hydro-electric power plants in the South has a bearing on the practical application of electric smelting of iron ores and the subsequent treatment of iron, steel and the alloys that should attract the attention of the scientific mechanical departments of iron and steel plants to determine if there may not be large possibilities for the future use of this economically obtained electric energy.

Experience shows that the smelting of ores thermo-electrically requires only one-third the coke required in ordinary smelting process, and that the sulphur and phosphorous are greatly reduced, so that a purer pig-iron is obtained from poor ores; also chacoal may be used if more convenient than coke. The ideal conditions for advantageous use of thermo-electric smelting would be where coking and flux are expensive and electric energy cheap, but as the resulting pig-iron in thermo-electric smelting is freer of sulphur and phosphorous, it is possible that the conditions in the localities of large hydro-electric developments and average ores would make thermo-electrical smelting processes advantageous.

The recent report of Consul-General Bordewich at Christiana, Norway, is interesting in this connection. He states that experiments to produce iron and steel from Norwegian ores by thermo-electric process have been made during the last four years and the industry promises to become one of considerable importance. There has already been an output of 250 tons of iron from recent smelting by the use of an electric furnace of about 500 horse-power. The Hardanger Electric Iron & Steel Co. has been organized to locate works at Ullensvang, Hardanger. It will receive electric energy from an adjoining hydro-electric company at a cost of $8.04 per horse-power, using 4200 horse-power for a period of 30 years. The transportation of the ore will be expensive, but it is believed that the advantage of cheap power and excellent harbor facilities will overcome this disadvantage.

The further application of the electric furnace to the production of high quality tool steel and steel alloys is noteworthy, from the fact that the high temperatures obtainable result in accurately-regulated compositions of the finished product, and several establishments have already given this phase practical attention.

New Concrete Mixer.

One of the newest mixer equipments now being marketed is the Eureka No. 90. The machine was exhibited for the first time at the New York Cement Show last December, and was one of the most attractive features in cement machinery. The equipment is built for heavy concreting. The capacity is large—20 to 25 cubic yards an hour—it is operated by a

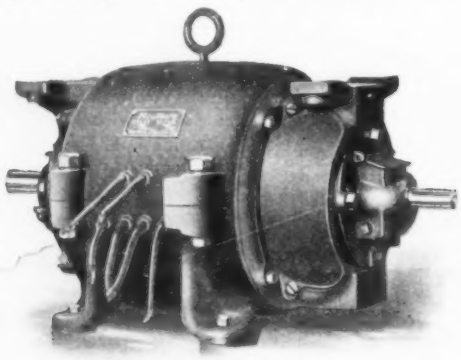
six-horse-power gasoline engine, and weighs complete 4700 pounds. Over 800 pounds of crucible steel is used in every machine. This means that the feeders and all parts subjected to any strain are made of material that is practically unbreakable. The Eureka Machine Co. of Lansing, Mich., uses in this new machine the same exclusive features of proportioning and mixing that have made its other types well known. The new field for this machine will be among contractors who bid on large work, such as paving, heavy foundations, dams, etc.

New Type Crane Motor.

A new type of direct current reversible and totally enclosed crane motor, known as the "Western Electric" Hawthorn type HLA, has just been placed on the market by the Western Electric Co. of Hawthorn, near Chicago, and 463 West street, New York.

The manufacturer claims for this motor high electrical efficiency with a compact and rigid construction, which insures absolute reliability under the severe conditions common to crane and hoisting service.

This motor is of the totally enclosed split frame type, and is built in sizes ranging from $1\frac{3}{4}$ horse-power at 1375 R. P. M. to 50 horse-power at 525 R. P. M. The frame is cylindrical in form and of small diameter, requiring minimum headroom, and is cast of soft steel, with a low center of gravity and ample base surface



WESTERN ELECTRIC TYPE HLA CRANE MOTOR.

for rigidly bolting in place. The upper half of the frame may be lifted after removing six to eight bolts, leaving the armature and bearings intact. The heads are not split, but can be lifted out after removing the upper half of the frame and the bolts which secure the heads to the lower frame. This leaves the motor practically disassembled.

The motor heads, which are held in place by four bolts, are provided with brackets for the mounting of the back gear shafts and brake pads for the addition of magnetic brakes. These motor heads are adjustable, which permits of the motor being mounted in various horizontal positions.

The laminated pole faces, which are cast with the frame, are securely bolted to the poles, which eliminates iron loses and insures cool operation. The bearings are of the self-oiling, revolving ring type, and their surface is provided with bronze linings. This arrangement insures the efficient lubrication and good wearing qualities necessary for heavy duty.

The armature core and commutator are mounted on a "quill" to facilitate removal, and the commutator, coils and brush-holders are of the latest improved design for heavy duty.

Full Circle Corrugated Culvert Pipe for Construction of Roads.

The old term "Good Roads Problem" is being gradually but effectively transposed into "Good Roads Attainment," and many of the formerly impassable roads in the South are being transformed into smooth, graded highways.

But this work would be much benefited if those who undertake the construction and furnish materials should see to it that the very best grade only are used, thus enabling results to be achieved that justify the expenditure and thereby stimulate the improvement of other roads.

Inventive and constructive minds have made it possible to ascertain by actual test the value and merit of every material used in the construction of roads, so that the engineer or road builder of today is able to determine the adaptability of each. As a result, our road builders rightfuly place importance on building for permanency, and with the facilities at their command, improved road machinery and dependable materials, they can build substantial roads that will not be a continual source of worry and drain upon funds for repair.

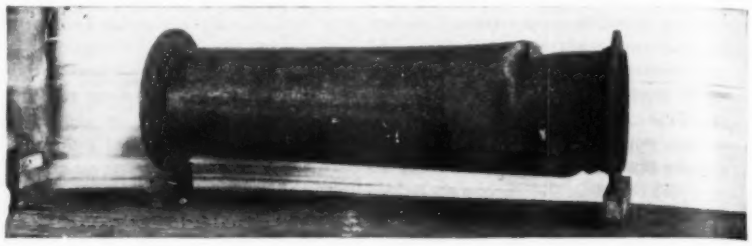
In the matter of small bridges and culverts, necessary to nearly all road work, the builder has before him various forms, among them being corrugated culvert pipe, made in continuous length to suit requirements. This pipe is perfectly round, and a complete circle is maintained in order to permit of equal strength in any point in the body of the pipe, regardless of what portion might lie nearest the surface. This culvert pipe has shown great strength both in test and practice for highway and railroad construction, and for the later work many railroads have installed it, thus testifying to its strength and durability. As this pipe requires no preparation before installation, as it is shipped ready for the trench, considerable saving is effected. Wherever culvert pipe is used, the main point to be considered is the lasting quality as applied to strength, durability and quality of material used in its manufacture.

Realizing, therefore, that as acids attack only the impurities in the metal, corrugated culvert pipe is now being made of the purest iron possible to obtain, thus giving the greatest resistance to rust and corrosion. A material of this high grade now being used for corrugated culvert pipe construction is known under the trade name of American ingot iron, and is guaranteed to be 99.94 per cent. pure iron. Corrugated culvert pipe has proven by practical use its efficiency in all that it implies for permanency, durability and economy when made of the best quality of iron and in gauges proven by experiences to be perfectly applicable in culvert service.

American Lap-Welded Pipe.

The American Spiral Pipe Works of Chicago is now making lap-welded pipe from open-hearth flange steel, from 55,000 to 65,000 pounds tensile strength, in sizes from 12 to 72 inches in diameter. After the pipe is welded it is again heated in a large annealing furnace and thoroughly annealed, thus removing any strains that may have occurred during the process of making. The company says:

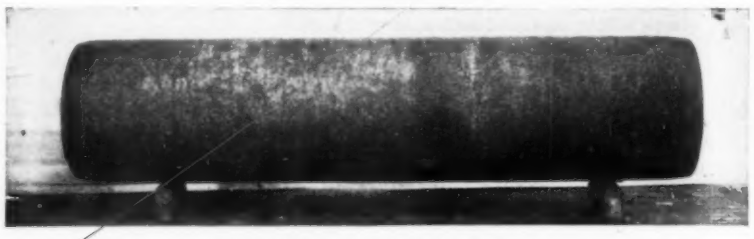
"Test bars cut from the welded seam show the weld possesses remarkable strength, and in many tests the strength was in excess of 60,000 pounds per square inch. In a test bar cut from the welded portion of 20-inch pipe one-quarter inch in thickness, the metal broke under a strain of 62,520 pounds per square inch at a short distance outside of the weld, while a bar cut from the same pipe away from which the welded seam stood 60,370 pounds



AMERICAN LAP WELDED PIPE.

per square inch. However, we do not claim the welded seam to be stronger than the material from which the pipe is made, but do claim to be making a weld which will average close to the maximum strength of the plate from which the pipe is made, and a weld which enables them to use the best grade of flange steel of 60,000 pounds tensile strength.

"A length of 24-inch I. D. pipe, one-quarter inch thickness, which was tested



AMERICAN LAP WELDED PIPE.

for fatigue of the metal to see if the weld would weaken under repeated strains. The pressure was brought up to between 900 and 1100 pounds nine different times, the pipe showing no signs of fracture, although it had bulged out one and one-quarter inches in diameter, stretching the metal about four inches. Finally on the tenth test a small fracture occurred near the weld. As the internal diameter of this pipe was then $25\frac{1}{4}$ inches, the strain on the metal was in excess of 55,000 pounds per square inch."

Herewith are two illustrations of the American Spiral Pipe Works' product. One view is a length of 20 inches inside diameter pipe one-quarter inch in thickness, which was crushed in a hydraulic press for the purpose of testing the welded seam. Although the seam was badly folded together, it remained perfectly tight under water pressure. It may be of interest to note that the total end pressure required to crush this pipe was 565,000 pounds. This pipe is used for high-pressure hydraulic lines, condenser piping, compressed air and in places where severe duty is required.

A New Levee Builder.

The scraper bucket excavator illustrated herewith is used to build levees along the Mississippi River, our view showing one that is raising the old levee near New Orleans to keep the "Father of Waters" in the "straight and narrow way."

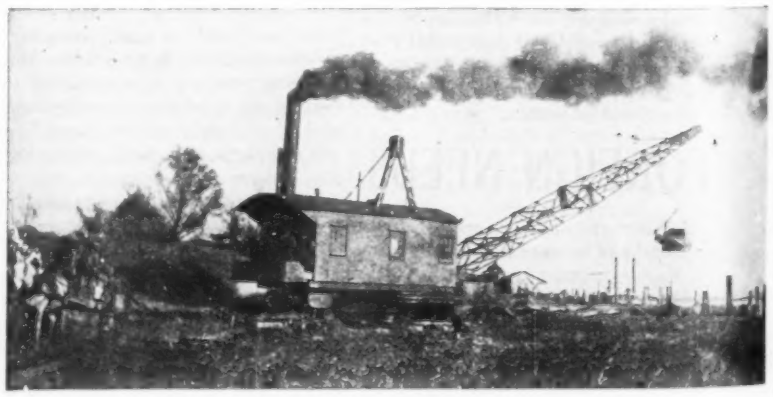
The work at this point is difficult, as the material to be used lies over old scows and other junk, and the bucket has frequently torn its way through old timbers and put great strain on the drag line.

The machine is equipped with a one-and-one-half-yard bucket and a boom of 75 feet.

The machine is all of steel, set on wood rollers covered with pipe, and as the swing is a complete circle, there is considerable territory to cover before a move is to be made.

Where the moves are often, the machines are equipped with two or four-wheel trucks under each corner, and these can be driven by an independent engine or from the engine on the upper deck.

The operation of the machine is entirely in the hands of one man, but a fireman looks after the boiler and the oiling. The boiler is of the horizontal locomotive type, and receives its water from storage tanks under the deck, which are filled by a pump with its suction pipe through the center pin.



A NEW LEVEE BUILDER.

This style machine is being used for digging, canals, building embankments, digging gold ore, etc., and is built in a number of sizes by the Browning Manufacturing Co. of Cleveland, O.

In 1910 from points on the Valley branch of the Southern Railway between Harrisonburg and Manassas, Va., 193,000 barrels of apples were shipped.

Construction Department

TO OUR READERS!

In order to follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and when this is necessary the statements are made as rumored or reported, and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be shown on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the postoffice will be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular.

"In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned."

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is $25 per year. On all advertising contracts in the Manufacturers Record for three months or longer a subscription for the contract period to the Daily Bulletin is included.

BRIDGES, CULVERTS, VIADUCTS

Ala., Prestwick.—Mobile Portland Cement & Coal Co., O. Gerlach, chief engineer, St. Stephens, Ala., will construct seven wooden trestles 175 feet to 350 feet long in connection with construction of 14 miles of railroad from Prestwick to Tombigbee, Ala. (See "Machinery Wanted.")

Ky., Louisville.—David R. Lyman, City Engineer, is preparing plans for bridge to be constructed across Beargrass Creek at Logan St.; reinforced concrete; cost $15,000.

Ky., Louisville.—Kentucky & Indiana Terminal Railroad Co., Wm. M. Mitchell, chief engineer, Louisville, awarded contract to Foster-Creighton-Gould Co., Nashville, Tenn., for construction of abutments in connection with construction of bridge and revision of road; work includes 6000 yards of concrete; will be completed by spring.

Mo., Kansas City.—Engineers appointed by Twelfth Street Traffic Way Commission adopted plan by Waddell & Harrington, Leslie-Orear Bldg., Kansas City, for viaduct at 12th St.; concrete girder structure; upper level from Liberty St. to Summit St. is to have 22-foot space on north side for street cars, 30-foot general traffic roadway, 4-foot sidewalk on south side and 30-foot roadway on 12th St. east of Lincoln St.; lower level from Hickory St. to bluffs to have 30-foot roadway, estimated cost, $557,425.

S. C., Greenville.—Greenville county will construct bridge over Tiger River and bridge over creek at Campbells Mill, in Highland township; contract will be awarded February 3; J. P. Goodwin, supervisor. (See "Machinery Wanted.")

S. C., Mt. Holly.—Atlantic Coast Line Railway Co., E. B. Pleasants of Wilmington, N. C., chief engineer, awarded contract to H. M. Allport & Son, Richmond, Va., for second track construction (19 miles) from Mt. Holly to Bonneau, S. C., including 6000 cubic yards of concrete for culverts.

Tex., Lampasas.—Lampasas county will petition Commissioners' Court to authorize vote on bond issue for construction of bridge across Lampasas River at Waco Road crossing. Address County Commissioners.

Va., Monterey.—Highland county will construct steel or concrete bridge 74 feet long; bids will be received at Clerk's office, Monterey, until February 9; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

Va., Richmond.—Southampton Bridge Corporation incorporated with $50,000 capital stock to construct proposed bridge across James River, connecting Westhampton with Chesterfield county; structure will be 950 feet long and 20 feet wide; steel or concrete construction; 26 feet above mean low water, 17 feet above bank and 18 inches above high-water mark; bids received until February 5; Thomas S. Winston is president; William T. Reed, vice-president, and Oliver J. Sands, secretary-treasurer.

W. Va., Fairmont.—Baltimore & Ohio Railroad, Francis Lee Stuart, chief engineer, Baltimore, Md., is arranging, it is reported, for construction of double-track bridge over Monongahela River at Gaston Junction; has petitioned Government for authority to construct structure on abutments and pier of present structure.

CANNING AND PACKING PLANTS

Mo., Brandsville.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, contemplates establishment of canning factory in connection with development of fruit orchard. (See "Land Developments" and "Machinery Wanted.")

Mo., St. Louis.—West End Packing Co. incorporated with $30,000 capital stock by Nathan Courtney, Matthew Courtney and Edward Courtney.

Okla., Ardmore.—O. G. Warren is interested in establishment of proposed packing plant.

Okla., Tulsa.—Mehle Packing Co. increased capital stock from $25,000 to $50,000; will make improvements to plant.

Okla., Tulsa.—Tulsa Packing Co. will more than double present floor space; will construct three-story brick or stone cold-storage room, about 75x150 feet.

Tex., Cuero.—Charles Vogt of Vogt & Sons, Philadelphia, Pa., will, it is reported, establish pork packery with initial daily capacity of 50 hogs; establish fertilizer factory to utilize waste.

Tex., Jacksonville. — A. Bird of Rogers, Ark., proposes establishment of cannery.

Va.-Tenn., Bristol.—A. L. Womack Company incorporated with $25,000 capital stock; will erect canning plant.

CLAYWORKING PLANTS

Ark., Little Rock.—T. R. Mills Lime & Brick Co. incorporated with $90,000 capital stock by T. R. Mills, C. B. Mills and H. D. Lewis, all of Little Rock.

Ky., Glasgow—Pottery.—A. L. Harris is reported as contemplating organization of company to establish pottery.

Mo., Kansas City — Terra-cotta.—Kansas City Terra-Cotta Co. (previously reported incorporated with $100,000 capital stock by C. C. Corwin and others) will establish plant to manufacture terra-cotta; erect main building 62x244 feet, another 30x60 feet, and boiler and machine shop; weekly capacity 50 tons of terra-cotta; construction begun.

Tex., Fort Worth—Pottery.—Texas Pottery Co. (previously reported incorporated with $20,000 capital stock) will open bids March 1 for erection of $3000 concrete building; John Scharbauer, president; J. F. Marberry, vice-president and treasurer; W. M. Mosur, secretary.

Tex., New Waverly — Terra-cotta and Pressed Brick.—Texas Terra-Cotta Tile & Pressed Brick Co., Carter Bldg., Houston, Tex., incorporated with $100,000 capital stock by George Gwilt, Milton McConnell and Clement Watson; will establish plant to manufacture terra-cotta, tile, pressed brick and paving bricks; initial daily capacity 100,000 bricks; near New Waverly.

COAL MINES AND COKE OVENS

Ky., Artemus.—Ada Coal Co., recently reported incorporated with $5000 capital stock by A. G. Blowers and others, purchased old plant of Artemus Jellico Coal Co. and will resume operations.

Ky., Barbourville.—J. D. Main will develop coal mines.

Ky., Central City.—W. D. McIlhinney and S. J. Gish purchased 123,000 acres coal land with 42 mines having annual output of 4,700,000 tons coal; not ready to announce plans for further development.

Ky., Lexington.—Price Coal & Lumber Co. (recently reported incorporated with $100,000 capital stock) has 10,000 acres of coal land; plans no development at present; main office, 205 Franklin Bldg., Johnstown, Pa.; Charles S. Ling, president; A. P. Stephens, vice-president; J. J. Dougherty, secretary-treasurer.

Ky., Louisville.—Scanlon Coal Co. increased capital stock from $30,000 to $60,000.

Ky., Sullivan.—Penn Coal Co., Frostburg, Md., is name of company (recently reported organized by George Ruhl and others) to develop 525 acres of coal land; daily capacity, 250 tons of coal; John Connor is treasurer. (See "Machinery Wanted.")

Mo., St. Louis.—Pioneer Coal & Coke Co. incorporated with $10,000 capital stock by Frederick E. Coe, N. P. Withington and Alexander Yule.

Okla., Frederick.—J. W. McKinney is considering development of coal mines.

Tenn., Turley.—Rock Springs Coal Co. organized with $150,000 capital stock; purchased and will develop 700 acres coal land; equipping with electrical haulage plant of 1000 tons daily capacity and erecting 40 tenant-houses; president, R. E. Miller; vice-president, Alvin W. Jones; secretary-treasurer, John J. Kelley; all of Knoxville, Tenn.

Tex., Arlington—Bedford Development Co. has 3500 acres of coal land; plans for development not announced. (Recently noted at Fort Worth, Tex.)

W. Va., Gilmer.—Southwest Virginia Coal Co. incorporated with $50,000 capital stock by F. Ernest Brackett, Peter J. Seaver and Wm. E. Walsh of Cumberland, Md.; George S. Brackett and Walter F. Cline of Grafton, W. Va.

CONCRETE AND CEMENT PLANTS

Ala., Corey, P. O. Birmingham.—American Cement Tile Manufacturing Co. will establish plant to manufacture cement tile roofing.

Ga., Gainesville.—C. L. Deal Manufacturing Co. incorporated to manufacture cement, etc.

COTTON COMPRESSES AND GINS

Ala., Summerdale.—Progressive League is promoting establishment of cotton gin and feed mill; cost $2200 to $2500.

Tex., Avalon.—J. M. Powell & Son will rebuild cotton gin to replace plant recently reported burned; loss $15,000.

Tex., El Campo.—Carville & Son will erect eight-stand cotton gin to replace present plant; will double capacity.

Tex., Ennis.—John P. Boren will rebuild cotton gin reported burned; loss $11,000.

Tex., Waxahachie.—John P. Boren will rebuild gin, seed and cotton houses; loss $12,000.

COTTONSEED-OIL MILLS

Ga., Garfield.—Garfield Oil Mills, R. J. Walsh, manager, will rebuild seedhouse recently reported burned; mill construction; daily capacity 35 tons of seed products.

La., Harvey.—Swift & Co. of Chicago, Ill., awarded contract to Geo. J. Glover of New Orleans, La., for erecting their proposed cotton-oil refinery; plant will include buildings for refinery, cooperage, power-house and packing and shipping.

DRAINAGE AND IRRIGATION

La., La Salle Parish.—James Gould of Pine Bluff, Ark.; Adolph Rosedale of Enid, Okla., and Judge Edwards of Oklahoma City, Okla., purchased 30,000 acres of land in La Salle parish and will develop.

Okla., Chandler.—Lincoln County Commissioners invite bids until February 6 for construction of proposed drainage canal to straighten, deepen and widen about 40 miles of Deep Fork River; this is to be continuation of canal to be constructed by Drainage District No. 1 of Oklahoma county, contract for which was recently reported awarded to Sprangle Construction Co., Fort Wayne, Ind., at $30,000; about 200,000 acres of land in Lincoln county will be drained by proposed system, which acreage will be doubled when connection is made with Oklahoma County Canal.

Tex., Galveston.—Galveston County Commissioners have been petitioned to authorize formation of third drainage district, to comprise about 21,000 acres; estimated that $50,000 will be expended.

Tex., Lyford.—A. L. Stanford and associates are organizing company to construct irrigation system in lower Rio Grande Valley; will water 100,000 acres; ditch capacity, 1100 second feet; preliminary work not finished; cost $2,000,000; F. S. Miller Mercedes, Tex., is engineer.

ELECTRIC LIGHT AND POWER

Ala., Dothan.—City will construct electric plant and water-works; erect building and install equipment; R. W. Lisenby, clerk. (See "Water-works.")

Ark., Hazen.—Hazen Power & Light Co. (recently reported incorporated with $25,000 capital stock) awarded contract to D. S. Proctor, Hazen, for erection of $5000 fireproof building; cost of machinery (purchased), $10,000.

Ga., Dalton.—City will receive bids until February 24 for furnishing materials and making extension to electric-light plant and water-works; H. S. Jaudon Engineering Co., Box 582, Savannah, Ga., engineer in charge. (See "Water-works.")

Ky., Nicholasville.—City is considering installation of 150-horse-power boiler and 75-horse-power steam engine in electric-light plant; E. J. Glass is manager.

La., Lafayette.—Industrial Institute will construct electric-light plant; machinery purchased.

La., Many.—Many Ice, Water & Light Co. organized with W. C. Roaten, president; will construct electric-light plant. (See "Water-works.")

Md., Ellicott City.—Patapsco Electric & Manufacturing Co. contemplates installing gas producer and gas engines; Otto Wunder is superintendent.

Mo., Forsyth.—Ozark Power & Water Co. organized by R. W. Morrison and Warner S. McCall of St. Louis, Mo., to construct water-power-electrical plant on White River; plans to build dam 40 feet high to develop 2500 horse-power; plant reported to cost $400,000; Holman & Laird of St. Louis are the consulting engineers. (John A. Laird of St. Louis lately reported as planning this development.)

Mo., Moberly.—City will purchase and install electric generating unit and pumping machinery; contemplates furnishing electricity for electric lighting and industrial purposes. Address The Mayor.

N. C., Lakeview.—The Electric Light & Power Co. incorporated with $25,000 capital stock by F. R. Danley and J. B. Eastwood of Lakeview and J. R. McQueen of Pinehurst, N. C.

N. C., Murphy.—George A. Browning, Hotel Regal, has formed company to construct water-power-electrical plant; develop 500 horse-power.

Okla., Ardmore.—Ed S. Perry of Coalgate, Okla., plans construction of water-power-electrical plant.

Okla., Grove.—W. T. and O. W. Killam are interested in construction of electric-light system; applied to City Council for franchise.

Okla., Snyder.—City will vote February 7 on issuance of $25,000 of bonds for equipping and extending electric-light system. Address The Mayor.

Okla., Waukomis. — A. Williams, Ames, Okla., is considering construction of electric plant; applied for franchise.

S. C., Charleston.—City has engaged Rudolph Herring, engineer, of New York, to investigate construction of electric-light plant and submit recommendations with estimate of cost.

S. C., Springfield. — Springfield Electric Light & Power Co. incorporated with $20,000 capital stock by J. McB. Dean, Mike Cleaton, E. J. Boland, J. B. Smith and others.

Tenn., Germantown.—City petitioned Legislature for authority to issue $3000 of bonds for street paving and electric-light plant. Address The Mayor.

Tex., Brenham.—Brenham Compress, Oil & Manufacturing Co., D. C. Giddings, president, will install 300-horse-power compound condensing engine, direct connected to 250-kilowatt generator, new switchboard and motor for electrifying large part of oil mill; plant will be changed to 60-cycle 2200-volt three-phase system; contract for machinery awarded.

Tex., Glen Rose.—Somervell County Commissioners have granted franchise to Woodward M. Davis, fiscal agent for interested parties, to erect hydro-electric-light plant; construct concrete dam across Paluxy River; dam will have 12-foot breast and be 200 feet long; details for electric-light plant not arranged. (Recently noted.)

Tex., Kirbyville.—J. W. Fleming and J. Morton are considering, it is reported, construction of electric-light plant.

Tex., Lometa.—J. E. Baker, Killeen, Tex., purchased electric-light plant; will enlarge and improve.

Tex., Naples.—M. H. Sullivan, Jr., and Charles E. Grant will erect electric-light plant.

FERTILIZER FACTORIES

Ala., Ariton.—Ariton Fertilizer Co. incorporated with $10,000 capital stock by Fox Henderson, W. C. Windham, J. J. Barnes and J. H. Williams.

Md., Baltimore.—Miller Fertilizer Co., 5-9 S. Gay St., has plans by Theodore Wells Pietsch, American Bldg., Baltimore, for improvements to plant at Canton; will remodel building for installation of hoisting machinery, moving cranes, industrial railway, elevator, trolleys and generators; company will receive bids for electrical work until February 7; separate bids for other portions of work until February 2; cost of improvements, $15,000; Painter & Posey, engineers in charge, 324 N. Charles St., Baltimore; contractors estimating are Charles L. Stockhausen, National Marine Bank Bldg.; Morrow Bros., 218 E. Saratoga St.; John Hiltz & Sons, 3 Clay St.; all of Baltimore. (See "Machinery Wanted.")

Tenn., Tullahoma.—E. B. Blackman is negotiating with company to establish fertilizer plant. (See "Mining.")

Tex., Cuero.—Charles Vogt of Vogt & Sons, Philadelphia, Pa., will establish fertilizer factory. (See "Canning and Packing Plants.")

FLOUR, FEED AND MEAL MILLS

Ala., Birmingham.—Lynnville Mill & Elevator Co. incorporated with $21,000 capital stock; Almoth E. Smith, president and treasurer; Robert N. Bell, vice-president; Newton C. Smith, secretary; will establish grain mill and elevator.

Ala., Summerdale.—Progressive League is promoting establishment of feed mill and cotton gin; cost $2200 to $2500.

Ark., Arkadelphia.—Arkadelphia Flour Mill will double present daily capacity of 350 barrels of flour.

Ark., Charleston.—Jackson & Floyd will erect flour mill.

Ky., Smithfield. — Smithfield Milling Co. contemplates installation of steam plant for 100-barrel mill.

Mo., Harrisburg. — R. L. Hawkins and Frank Anderson contemplate establishment of flour mill.

Mo., Kansas City.—Victoria Flour Co. incorporated with $5000 capital stock by A. J. McMorrow, Lena Bulte and August Bulte.

N. C., Ashboro.—Southern Milling Co. organized by C. L. Crawford to erect flour mill; awarded contract to M. L. Davis, Ashboro, for erection of 40x6-foot brick building; three stories and basement; will open machinery proposals in March; daily capacity, 100 barrels of flour and 150 bushels of meal; S. L. Davis, president; Virgil Presnell, vice-president; C. L. Crawford, secretary-treasurer. (See "Machinery Wanted.")

N. C., Smith.—Peters Creek Union Milling Co. incorporated with $10,000 capital stock by W. M. Oberley and others.

Okla., Cherokee.—Cherokee Mill Co. incorporated with $40,000 capital stock by J. E. Walker, Bernard Dahlgren and others.

Okla., Muskogee.—Central Milling Co. incorporated with $24,000 capital stock by W. L. Keel, J. M. Hughes, C. L. Wolover and S. H. Criswell.

S. C., Westminster.—John J. Haley has purchased Southern Flouring Mill and will continue plant; will overhaul and install necessary new machinery; building already erected.

Tenn., Trenton.—Forked Deer Roller Mill Co. and Trenton Lumber Co. consolidated under name of Forked Deer Manufacturing Co. with capital stock of $50,000.

FOUNDRY AND MACHINE PLANTS

Ala., Birmingham—Engine Works.—Veitch-Matthews Engine Co. (previously reported reorganized) contemplates erecting plant to manufacture patented Veitch-Matthews turbo-rotary engine; capital stock $250,000; I. A. Lewis, president; George Veitch, Sr., vice-president; E. L. Huey, treasurer; J. M. Lovett, secretary; Wm. A. Lovett, fiscal agent, 1203 Equitable Bldg. (See "Machinery Wanted.")

La., Thibodaux — Boilers, etc. — Lafourche Boiler and Sheet Iron Works organized with $10,000 capital stock; will continue established plant; Theodore Dupre is president; Charles Dupre, vice-president; T. R. Simmons, secretary.

Mo., Kansas City—Hay Presses.—Kansas City Hay Press Co., E. C. Sooy, president, contemplates rebuilding hay-press plant at 8th and Mill Sts., reported burned at loss of about $25,000.

Mo., St. Louis—Mechanical Appliances.—Ward Manufacturing Co. incorporated with $10,000 capital stock by Willis E. Ward, John D. Moore and Jackson Guthrie.

Mo., St. Louis—Gas Machines. — National Gas Machine Co. (previously reported incorporated with $100,000 capital stock) has purchased 138x150-foot factory building and will manufacture gas machines; B. F. Fenn, president; Henry G. Wernimont, secretary-manager; Samuel O. Nichols, treasurer.

Mo., St. Louis — Diesel Engines. — Busch Sulzer Bros. Diesel Engine Co. incorporated with $2,100,000 capital stock to build engines under Diesel patents, including two and four cycle machines of both marine and stationary type; will build plant to cost about $1,000,000, but has not determined on location; will probably select St. Louis; Adolphus Busch, president; August A. Busch, first vice-president; J. R. Harris, second vice-president-general manager, each of St. Louis; chief engineer will be Max Rotter, now chief engineer of Allis-Chalmers Company of Milwaukee, Wis.

Okla., Oklahoma City—Machinery Plant.—Sherman Machine & Iron Co. will enlarge plant; erect buildings costing $400,000 on five-acre tract; buildings for foundry, machine shop, boiler shop, woodworking plant, storage warehouse, office, etc.; will organize N. S. Sherman Warehouse Co. to build 140x240-foot six-story fireproof warehouse. Address E. S. Sherman, Jr. (See "Warehouses.")

Okla., Tulsa—Gas Stoves.—Queen Bee Stove Co. awarded contract to Brickner-Laws Construction Co. of Tulsa to erect foundry buildings; two brick buildings covering site 60x120 feet; cost about $15,000; gas ranges and heaters will be manufactured at first. (Recently mentioned.)

Tenn., Bristol—Boilers.—Twin City Boiler Works, Henry Ehert, president, will install additional machinery, doubling capacity of plant.

Tenn., Chattanooga — Armature Works. — Chattanooga Armature Works has completed plans for shop building; to be constructed of brick; 47½x135 feet; fireproof; bids closed; no further machinery needed.

Tenn., Nashville — Stoves, etc. — Jones & Hopkins Manufacturing Co. will erect $10,000 addition to foundry and warehouse at 1st and Monroe Sts.

Tenn., Chattanooga—Sawmills, etc.—Shaban-Corley Company incorporated with $30,000 capital stock by J. W. Cavender, Lee N. Shahan, A. J. Corley, W. J. Shahan and W. B. Garvin; to manufacture sawmills, hay presses and other farming machinery and mill supplies.

Tex., Aransas Pass—Boiler Works, etc.—Aransas Foundry, Machine and Boiler Works will erect foundry and machine shop, 40x75 feet each; boiler shop, 40x60 feet; pattern and blacksmith shops, office and salesroom extra; day labor; machinery purchased; daily capacity, five tons of general foundry and machine work; officers not announced. (Recently noted to be established by Charles J. Stanzel.)

Tex., El Paso — Fiber Machinery. — Texas Fiber Machine Co. will erect factory to manufacture machines for converting certain species of cactus plant into fiber.

Va.-Tenn., Bristol—Stoves, etc.—Dominion Iron Works will increase capital stock from $20,000 to $75,000; erect new buildings and increase output of stoves and foundry products.

GAS AND OIL DEVELOPMENTS

Ala., Birmingham.—Cahaba Oil & Gas Co. incorporated with $10,000 capital stock; Geo. M. Morrow, president; Patrick Byrne, vice-president and general manager; John N. Gunels, secretary-treasurer.

Alabama.—P. M. Shannon and C. J. Shannon of Pittsburg, Pa., are reported to have option on 200,000 acres of gas and oil lands adjoining Fayette gas field and to have awarded contract to Reese & Rhinehart for development; also contemplate construction of pipe line to Birmingham. (Recently mentioned.)

Fla., Polk county.—W. J. Howey of Tampa, Fla., purchased 25,000 acres of land in Polk county between Bartow and Winterhaven and will colonize.

Okla., Braman.—Braman Gas & Oil Co. incorporated with $10,000 capital stock by H. C. Scott, William Fox, C. H. Lucas and others.

Okla., Nowata.—Cimbra Oil Co. incorporated with $10,000 capital stock by F. C. Henderson, Fred. Powell, both of Nowata, and Robert J. Coyle, Jr., of Pittsburg, Pa.

Okla., Sapulpa.—Deford Oil Co. incorporated with $10,000 capital stock by C. A. Vaughn and others.

Okla., Sapulpa.—Mary Tate Oil Co. incorporated with $10,000 capital stock by Rufus Thompson, Frank T. Smith and others.

Okla., Tulsa.—Northwestern Oil Co. incorporated with $50,000 capital stock by J. R. Woodard, Grant Waggoner and others.

Okla., Tulsa.—Surprise Oil Co. incorporated with $9000 capital stock by P. J. White, Thos. White and others.

Tex., Vinton.—The Texas Company, Houston, Tex., is reported as contemplating construction of six-inch pipe line between Vinton oil field and Big Eddy, near Orange, Tex., from thence to be shipped on barges to Port Arthur, Tex.

Va., Lee County.—Cedar Valley Oil Co., M. W. Marsden, general manager, Philadelphia, Pa., will develop oil deposits in Lee county; has sunk one shaft 2800 feet; is using cable capable of boring 3250 feet.

W. Va., Clarksburg.—Flora Oil & Gas Co. incorporated with $25,000 capital stock by Alfonso Dinaldo, Rosario Romano, Pasco Biafore and others.

W. Va., Clarksburg.—Camp Run Oil & Gas Co. incorporated with $75,000 capital stock by Howard P. Prothie, Ward Randolph, C. J. Sams, G. E. Martin and others.

W. Va., Huntington.—Greenview Oil & Gas Co. incorporated with $50,000 capital stock by I. K. Goff, G. F. Farrell, J. W. Valentine and others.

ICE AND COLD-STORAGE PLANTS

Ark., Little Rock.—Watson & Aven Company, 314 Center St. (recently noted organized with $150,000 capital stock and to install cold-storage plant), advises that building will not be erected until fall; building plans not completed.

La., Many.—Many Ice, Water & Light Co. incorporated with $12,000 capital stock; W. C. Roaten, president. (See "Water-works.")

Okla., Ardmore.—Ardmore Meat Market & Cold Storage Co. incorporated with $7000 capital stock by O. G. Warren, J. B. Miller and C. V. Miller.

Okla., Ardmore.—Tyler & Simpson Wholesale Grocery Co. is having plans prepared for cold-storage plant.

Okla., Pryor.—Pryor Ice & Light Co. incorporated with $50,000 capital stock by W. L. Jones, O. O. Snyder, W. H. Oliver and others.

Tex., Houston.—Armour & Co., Chicago, Ill., have plans by R. C. Clark of Chicago for storage plant; 100x125 feet; three stories and basement; reinforced concrete; cost $100,000; storage capacity for 145 beeves and extensive smoking and packing departments.

Tex., Kirbyville.—J. W. Fleming and J. Morton are, it is reported, considering establishment of ice plant, water-works and electric-light plant.

Tex., Naples.—M. H. Sullivan, Jr., and Charles E. Grant are arranging to establish ice and light plant.

Tex., Matagorda.—A. B. Lorino will establish ice plant.

Va., Richmond.—City plans installation of cold-storage plant in Second market, to cost $50,000. Address The Mayor.

LAND DEVELOPMENTS

Ala., Birmingham.—Gulf States Land Co. incorporated with $10,000 capital stock; J. W. McKee, president; E. G. Bruce, vice-president; Odo Z. Neill, secretary-treasurer.

Ark., Cave Springs.—Cave Springs Development Co. incorporated with $50,000 capital stock by J. B. Robertson, W. C. Davis and H. M. Cleveland.

Ark., Little Rock.—Arkansas Farms Co. incorporated with $50,000 capital stock by R. K. Fitzhugh, J. F. Wolfe, T. B. Davis and others.

Ark., Little Rock.—Baring Cross Realty Co. incorporated with $50,000 capital stock by C. P. Perrie (president), Harry Lasker, E. J. Bodman and others.

Fla., Jacksonville.—Atlantic Seashore Co. incorporated with $50,000 capital stock; S. S. Goffin, president; Thomas Clarke, vice-president; W. L. Sperring, secretary-treasurer.

Ga., Union City.—Greater Georgia Development Co. organized with $1,000,000 capital stock by St. Elmo Messengale of Atlanta, Ga., W. F. Dorsey of Athens, Ga., H. H. Dean of Gainesville, Ga., and others; purchased about 900 lots; will construct 15 to 20-acre lake, erect hotel, develop resort, etc.

La., New Orleans.—Old River Land Co. incorporated with $250,000 capital stock; I. Hechinger, president; E. D. Saunders, vice-president; C. G. Hechinger, secretary-treasurer.

La., Morgan City.—Willard Ditch will develop property near Canal Bank for factory sites; also construct canal and build industrial track.

Md., Baltimore.—Ruby Orchard Co. incorporated with $5000 capital stock by Charles K. Anderson, Young Men's Christian Association; Clarence H. Porter, 1112 Brentwood Ave.; Geo. L. Horn, Windsor Mills Rd.

Miss., Canton.—Madison Land & Improvement Co. incorporated with $25,000 capital stock by J. C. Longstreet, L. B. Moseley, H. H. Hughes and others.

Mo., Arcadia.—Country Club is being organized with John H. Curran, president; John H. Gundlach, first vice-president; T. C. Young, second vice-president; F. N. Chesney, treasurer, all of St. Louis, Mo.; Fuller Swift, secretary, of Arcadia; purchased 600 acres of land; will establish summer resort; construct lake, golf links, tennis courts; subdivide portion into bungalow sites and remainder for club; will erect clubhouse; offices in Third National Bank Bldg. (See "Miscellaneous" under Building News.")

Mo., Brandsville.—Sunnyslope Orchard Co., recently reported incorporated with $50,000 capital stock, will clear and plant 440 acres of land in apple and peach trees; cultivate nursery stock, strawberries, tomatoes, etc.; also engage in stock raising; will operate cannery in connection; Theodore R. Birkhauer, general manager. (See "Machinery Wanted.")

N. C., Gastonia.—S. W. Dandridge, president of S. D. Dandridge & Co. of Charlotte, N. C., has option on 5000 acres of land surrounding Linwood College, and plans to subdivide and develop.

N. C., Charlotte.—Blue Ridge Land Co. incorporated with $100,000 capital stock by C. H. Robinson, W. D. Wilkinson, A. W. Burch and others.

N. C., Durham.—New South Realty Co. incorporated with $10,000 capital stock by John J. Hust, Joseph F. Marshall and W. A. Fulford.

N. C., Waynesville.—Southern Assembly incorporated with $250,000 capital stock; Rev. James Atkins, president; S. C. Satterthwait, secretary; B. J. Sloan, treasurer; all of Waynesville; Dr. James Cannon, general superintendent, Blackstone, Va.; will develop 1000 acres of land for summer assemblies, erect auditorium, hotels, lecture hall, etc. (Details previously reported.)

Tenn., Chattanooga.—National Cemeteries Co. incorporated with $10,000 capital stock by Roger W. Snyder, H. M. Harton, W. K. Monroe and others.

Texas.—Texas-Gulf Fruit Land Co. incorporated with $100,000 capital stock by W. J. Maloney, M. C. Taylor and W. N. Akers, all of Wilmington, Del.

Tex., Ulmer.—Lake Creek Development Co. incorporated with $69,000 capital stock by William B. Renn, D. Atchison and C. L. Peirce.

Va., Norfolk.—Virginia & Texas Land & Orchard Co. incorporated with $15,000 capital stock; W. E. Council, president; H. E. Council, vice-president; Stanley Scott, secretary-treasurer.

Va., Princess Anne County.—East Norfolk Land Co. incorporated with $100,000 capital stock by L. C. Massey, U. G. Young, C. J. Turley and others, all of Charleston, W. Va.

W. Va., Bluefield.—Northwestern Land & Fruit Co., recently reported incorporated with $125,000 capital stock, will develop lands in Oregon; J. Frank Maynard of Bluefield is president.

LUMBER MANUFACTURING

Ala., Ensley.—Pioneer Lumber & Creosoting Co., recently noted to have increased capital

stock to $30,000, will erect building and install machinery to manufacture building and creosoted materials of all kinds; F. J. Sheppard, Birmingham, Ala., is president.

Ala., Montgomery.—Tilogin Mill & Turpentine Co. incorporated with $20,000 capital stock by T. E. Bogett, O. W. Finney, J. T. Darling and others.

Fla., Clay County.—R. L. Dowling of Ocala, Fla., and T. W. Shands of Gainesville, Fla., purchased 115,000 acres timber land on St. John's River; will turpentine; has no plans for manufacturing lumber in near future. (Lately mentioned.)

Ga., Newnan.—R. W. Freeman, B. T. Thompson, J. J. Keith and others purchased 1000 acres of timber land for $50,000 and contemplate erecting saw mills.

Ky., Calhoun.—McLean County Building & Planing Mill Co. incorporated with $10,000 capital stock by W. P. Landrum, John P. Simer and Ben. F. Landrum.

Ky., Georgetown.—Penn Lumber Co. increased capital stock from $25,000 to $30,000.

La., Pawnee.—J. A. Kurth, S. W. Henderson and Eli Wiener purchased Conrad Bering Lumber Co. planing mill and timber lands; price reported as $225,000; will build sawmill to replace plant recently burned.

Miss., Earl.—Beaver Dam Lumber Co. incorporated with $100,000 capital stock by W. G. Lancaster, D. W. Slay, D. M. Eubanks and George I. Dennis.

Mo., Brandsville.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, will cut timber on 440 acres of land; saw mill work will be done by contract; will manufacture tongue and groove oak flooring, etc.

Mo., St. Louis.—Aetna Lumber & Glazed Sash Manufacturing Co. incorporated with $2000 capital stock by Henry F. Hafner, Harry E. Weber and Richard A. Jones.

N. C., Elizabeth City.—Charles A. Jamison of New York is reported to have purchased (for $35,000) about 2000 acres of timber land.

N. C., Morehead City.—Morehead City Manufacturing Co. incorporated with $10,000 capital stock by D. G. Bell, J. C. Long and E. H. Gorham.

Okla., Medford.—J. F. Thomas Co. incorporated with $15,000 capital stock by J. F. and M. E. Thomas and E. Harpstrite of Medford, and W. E. and C. Thomson of Lakewood, N. M.

S. C., Alcolu.—D. W. Alderman & Son Company, D. W. Alderman, president, will open bids at once for rebuilding of burned sawmill; 40x150 feet; two and a half stories; probably fireproof; will install sawmill machinery. (Previously mentioned.)

S. C., Blaney.—Newton Kelly will supervise erection of lumber mill for cutting hard and soft woods.

S. C., Marion.—Carolina Yellow Pine Co. increased capital stock from $100,000 to $150,000.

S. C., Charleston.—Sea Coast Timber Co. incorporated with $500,000 capital stock; Henry F. Welch is president; R. P. Rucker, secretary-treasurer.

Tenn., Knoxville.—Vestal Lumber & Manufacturing Co. and Knoxville Woodworking Co. will, it is reported, rebuild plant recently reported burned.

Tenn., Trenton.—Trenton Lumber Co. and Forked Deer Roller Mill Co. will consolidate as Forked Deer Manufacturing Co. with $50,000 capital stock.

Tex., Fort Worth.—Ford & Isbell Lumber Co. changed name to Ward-Isbell Lumber Co. and increased capital stock from $100,000 to $150,000.

Tex., Garza.—Garza Lumber Co. incorporated with $2500 capital stock by George P. Elbert, H. V. Hennon and J. B. Walker.

Tex., Kirbyville.—J. W. Fleming and J. Morton are considering, it is reported, establishment of planing mill.

METAL-WORKING PLANTS

Ark., Helena — Metal Beds. — Milwaukee Metal Bed Co., Milwaukee, Wis., will, it is reported, establish branch plant at Helena; advises Manufacturers Record that company will not at present establish the plant.

Mo., St. Louis—Cans.—Donnell Sanitary Milk Can Co. incorporated with $50,000 capital stock by W. F. Donnell of Hematite, Mo.; John F. Meier of Pevely, Mo., and L. W. Myer of St. Louis.

Mo., St. Louis—Muzzles, etc.—Carroll Muzzle Co., A. W. Swender, president, Carroll, Ia., will, it is reported, establish plant for manufacturing wire muzzles and wire novelties.

Va.-Tenn., Bristol.—Bristol Sheet Metal Works will increase capital stock from $50,000 to $100,000. (Previously noted.)

MINING

Ky., Olive Hill—Stone.—Atlas Stone Co. incorporated with $15,000 capital stock by J. W. Shumate, W. N. King and J. H. Mobley.

Ky., Olive Hill—Clay.—Clay Lands Co. incorporated with $5000 capital stock by J. L. Tabor, J. B. Elford, Robert Jordon and others.

Mo., Jasper County—Lead and Zinc.—H. Cohn of Joplin, Mo., purchased mining property in Jasper county; will install mining equipment and develop.

Mo., Joplin.—Cremo Mining Co. incorporated with $15,000 capital stock by J. C. Squires, J. G. Carmean and others; acquired Caldwell-Allen mine at Porto Rico (12½ acres) and will operate with capacity of 200 tons per shift.

Mo., St. Louis—Lead and Zinc.—Universal Placer Mining Co. incorporated with $5000 capital stock by John Ott, T. Wright Cameron, Frank J. Meyer and others.

Tenn., Pulaski—Phosphate.—Tennessee Farm & Land Co. incorporated with $20,000 capital stock by D. D. Dunn, B. C. Barton, W. F. Webb and others; will develop phosphate lands.

Tenn., Tullahoma—Phosphate.—E. B. Blackman is negotiating to develop 3280 acres of phosphate deposits and establish fertilizer factory; corporation not formed. (Recently noted.)

Va., Pulaski—Iron.—W. E. Kinsey and Abell Shelor of Rapid Transit Development Co. of New York will develop red oxide of iron deposits; will ship ore to Roanoke and manufacture into paint; will erect factory building in Roanoke.

MISCELLANEOUS CONSTRUCTION

Ala., Birmingham—Tunnel.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., will concrete Divide tunnel at cost of about $25,000.

Ga., Union City—Lake.—Greater Georgia Development Co. (W. F. Dorsey, Athens, Ga., and others) contemplates construction of lake to cover 15 to 20 acres. (See "Land Developments.")

La., Fairview—Levee.—Board of State Engineers, New Orleans, La., awarded contract for construction of levee along Mississippi River in Corcordia parish, Fifth Louisiana Levee District; will require 180,000 cubic yards of earthwork.

La., Morgan City—Canal.—Willard Ditch will construct canal through property to be develpoed as factory section. (See "Land Developments.")

Md., Baltimore—Recreation Pier.—Oscar F. Lackey, Harbor Engineer, City Hall, submitted plans to Board of Estimates for proposed recreation pier to be erected at foot of Broadway; 550x150 feet; two decks; cost $350,000 to $375,000.

Md., Fort Howard—Wharf.—Government awarded contract to R. H. Richardson, Hampton, Va., at $4000 to construct wharf and boathouse.

Miss., Bay St. Louis—Seawall.—City awarded contract to Bert Victor, Pascagoula, Miss., to construct seawall; length 1018 linear feet; will be of curtain type, constructed of cement, sand, gravel and reinforced steel, built on piling and anchored in rear to concrete posts by steel rods; base of wall to extend five feet below surface water into sand; cost $4000; plans drawn by Government engineer; contracts for steel, piling, gravel, cement and lumber have been awarded.

Okla., Tulsa—Subway.—City Commission approved plans and specifications prepared by St. Louis & San Francisco Railroad, F. G. Jonah, chief engineer construction, St. Louis, Mo., for subway to be constructed under tracks on Denver Ave.; will extend entirely across right of way, about 200 feet; estimated cost $10,000. (Previously mentioned.)

Tenn., Tullahoma—Lake.—Knights of Pythias, Alexander Scott, secretary, Chattanooga, Tenn., will construct lake to cover 15 acres. (See "Association and Fraternal" under "Building News.")

Tex., Aransas Pass—Wharf, etc.—Aransas Pass Channel & Dock Co., E. O. Burton, president, awarded contract to J. P. Nelson, San Antonio, Tex., for construction of wharf, warehouse, switches and apron on Harbor Island, on channel front; contract calls for warehouse, 200x600 feet; 3000 feet of switch track running parallel to wharf and warehouse; slip will be dredged back to island 1000 feet, and arrangements made to handle three large vessels at one time; at the end of switches an apron will be built to handle material; C. S. Corrigan is chief engineer. (Previously noted.)

Ga., Augusta—Rip-rap Construction.—Government awarded contract to Bryan & Co., Jacksonville, Fla., at $244,860 for construction of rip-rap work on Savannah River between Hawks gully and Center St., distance of 7950 feet; Col. Dan C. Kingman, Savannah, Ga., is U. S. engineer in charge. (Full details recently announced.)

Tex., Austin—Filtering Trench.—City awarded contract to Ray McDonald of Austin at $8500 to construct reinforced concrete filtering trench from beds under International & Great Northern Railroad bridge to well near power plant; 300 feet of trench.

Va., Norfolk—Canal—Board of Aldermen appropriated $7000 to purchase right of way for canals to connect Lakes Bradford and Joyce with city water-works; W. T. Brooke, City Engineer.

MISCELLANEOUS ENTERPRISES

Ala., Birmingham.—Lynnville Mill & Elevator Co. incorporated; Almoth E. Smith, president and treasurer. (See "Flour, Feed and Meal Mills.")

Ala., Birmingham—Asphalt Paving, etc.—Southern Asphalt Construction Co. incorporated with $5000 capital stock; J. R. Copeland, president; J. E. Donelson, vice-president; Eugene Fies, secretary-treasurer; purchased $15,000 worth of machinery and will erect plant costing $30,000 to $35,000; will contract to pave streets.

Ala., Birmingham—Dairy.—Cloverdale Dairy Co. organized with $10,000 capital stock; C. Gazzum, president; John L. Kaul, vice-president; J. H. Eddy, secretary-treasurer; F. L. Moses, general manager; acquired plant of Certified Dairy Co. in Shades Valley and will make improvements.

Ala., Demopolis—Printery.—Demopolis Printing Co. incorporated with $5000 capital stock by E. S. Cornish, C. A. VerBeck and M. G. Cornish.

Ala., Gadsden—Machinery.—Queen City Machine Co. organized with $85,000 capital stock; will repair, purchase and sell machinery.

Ala., Greensboro—Hardware.—City Hardware Co. incorporated with $9000 capital stock by H. M. Stickney, S. P. Stickney and H. M. Henderson.

Ala., Guntersville—Hardware.—Alnes Hardware Co. incorporated with $8000 capital stock by J. Hodge Alnes, H. Powell Alnes and Robert H. Alnes.

Ark., McGehee.—Scott McGehee will establish laundry. (See "Hotels.")

Fla., Jacksonville—Gas Controllers.—Gas Users' Association organized with $35,000 capital stock; W. S. Jordan, president; C. B. McRae, vice-president; S. C. Cobb, secretary-treasurer; C. R. Miller, manager; will sell gas controllers, gas appliances and fixtures; erect no building.

Ga., Atlanta—Steamboat Line.—Oconee Steamboat Co. incorporated with $6000 capital stock by J. S. Fitchett, J. E. Smith, Jr., B. A. Hooks and others.

Ga., Dalton—Steam Laundry.—S. H. Hill of Murphy, N. C., plans establishment of steam laundry.

Ky., Elizabethtown—Printery.—Munford Printing Co. incorporated with $20,000 capital stock by E. Binnell, Roy M. Munford and Madge Munford.

Ky., Louisville—Supplies.—American Supply Co. incorporated with $10,000 capital stock by Newton R. Kinser, Herman Carsey and E. A. Carsey.

Ky., Louisville—Flowers.—American Floral Co. incorporated with $10,000 capital stock by J. S. Shrobanck and H. Oswald Georges.

Ky., Morehead—Hardware.—Claudill Hardware Co. incorporated with $25,000 capital stock by Abel Claudill, J. F. Knapp and others.

La., Lafayette—Automobiles.—Lafayette Motor Car Co. incorporated with $25,000 capital stock; Chas. D. Caffery, president; S. R. Parker, vice-president; T. G. Biossat, Jr., secretary-treasurer and manager.

La., Lake Charles—Publishing.—Times Publishing Co., Ltd., incorporated with $15,000 capital stock; John Marshall, president; Geo. W. Brayton, vice-president; Frank M. Terrell, secretary; will publish daily newspaper.

La., New Orleans—Cattle Guards.—American Cattle Guard Co., 712 Whitney Central Bldg., recently reported incorporated with $100,000 capital stock, will install molding and stamping machinery to manufacture railway cattle guards; daily capacity, 25 cattle guards; J. M. Dick, president; C. I. Dick, vice-president; J. A. D'Hemecourt, secretary-treasurer.

Md., Baltimore—Machinery.—E. G. Mergenthaler Co. incorporated with $4000 capital stock by Eugene G. Mergenthaler, The Marlborough; Herbert Schroenrich and Herman C. Mergenthaler.

Md., Baltimore—Printery.—Kogan Printing Co. incorporated with $2000 capital stock by Jos. S. Jacobs, 1807 E. Lombard St.; Abraham Roth, 1312 E. Baltimore St., and Wm. Purnell Hall.

Md., Baltimore—Coal Depot.—J. P. Brandau & Bro., York Rd. and 26th St., will erect one-story brick and stone addition to coal depot; 36x200 feet; slate roof; concrete foundation.

Md., Cumberland—Sand Mill.—Builders' Supply Co., Citizens' Bank Bldg., is erecting 100-ton sand mill in conjunction with crushing plant; contract awarded to Henry K. Martin Brick Machine Manufacturing Co., Lancaster, Pa.

Mo., Kansas City—Construction.—Commercial Construction Co. incorporated with $20,000 capital stock by A. Bickels, N. N. Dalton and E. B. Sanford.

Mo., Kansas City—Engraving.—Siegrist Engraving Co. incorporated with $10,000 capital stock by Henry S. Siegrist, Geo. A. Lunback, A. H. Bushnell and others.

Mo., St. Louis—Bricklaying, etc.—L. Wismann Bricklaying & Contracting Co. incorporated with $2000 capital stock by A. W. Wismann and others.

Mo., St. Louis—Hardware.—Webb Hardware Co. incorporated with $10,000 capital stock by Richard Webb, Herman C. Guenther, Albert Wassen and others.

Mo., St. Louis—Construction.—Hannan-Hickey Bros. Construction Co., recently reported incorporated with $50,000 capital stock, has elected P. J. Hannan president, V. P. Hickey vice-president, D. P. Hickey secretary, P. E. Hickey manager; will conduct general contracting business.

Mo., St. Louis—Gas Tank.—Laclede Gas Light Co. will construct $275,000 gas tank.

Mo., St. Louis—Hardware.—Webb Hardware Co. incorporated with $10,000 capital stock by Richard Webb, H. C. Guenther and Albert Wassem.

Okla., Sugden—Publishing.—Signal Publishing Co. incorporated with $2000 capital stock by J. C. Dale, J. E. Betterton, both of Waurika, Okla.; Thomas J. Cross and O. C. Conway, both of Sugden.

Okla., Tulsa—Laundry.—M. A. Younkman will erect laundry; brick and concrete; cost $3000.

Okla., Vinita—Publishing.—Journal Publishing Co. increased capital stock from $4500 to $10,000.

S. C., Chesterfield—Distributing—Union Distributing Co. will increase capital stock from $4000 to $10,000.

S. C., Chesterfield—Hardware.—Moore Hardware Co. incorporated with $5000 capital stock; A. M. Moore, president; R. Armfield, secretary-treasurer.

S. C., Lake City—Drugs.—Farmers & Merchants' Drug Co. incorporated with $4000 capital stock; Dr. S. B. W. Courtney, president; W. W. Singletary, vice-president; V. G. Arnette, secretary; Dr. J. D. Eaddy, treasurer; A. Weaver, manager.

Tenn., Memphis—Road Material.—Faxon Chert Co. incorporated with $10,000 capital stock by W. B. Troy, Jr., F. W. Nichols, W. A. Shibley and others.

Tenn., Memphis—Grain.—Ryerson Grain Co. incorporated with $5000 capital stock by E. A. Ryerson, J. S. Ryerson, E. H. Claypool and others.

Tenn., Memphis—Automobiles.—Interstate Motor Sales Co. incorporated with $300 capital stock by J. H. Hines, R. T. Ronaldson, L. C. Hudson and others.

Tenn., Memphis—Contracting.—Tennessee Contracting Co. incorporated with $20,000 capital stock by C. W. Hunter, Walter Hunter, Ernest S. Bell and others.

Tenn., Nashville—Electrical Supplies.—Henry M. Moses Electric Co. incorporated with $5000 capital stock by Henry M. Moses, H. C. Keeton, B. A. Massey and others.

Tex., Abilene—Building.—Sayles Building Co. incorporated with $40,000 capital stock by Henry Sayles, Jr., John Sayles and S. T. Morehead.

Tex., El Campo—Hardware.—Smith-Evans Hardware Co. incorporated with $25,000 capital stock by C. N. Hudson, E. R. Smith and J. E. Evans.

Tex., El Paso—Gas Tank.—El Paso Gas & Electric Co. will, it is reported, install gas tank with 500,000 cubic feet storage capacity, and make extensions to gas mains.

Tex., Fort Worth—Grain.—Empire Grain Co. of Texas incorporated with $40,000 capital stock by Frank Kell, E. G. Rall, R. M. Kelso and others.

Tex., Port Arthur—Construction.—Spencer-Howe Construction Co. incorporated with $5000 capital stock by Alfred Spence, W. W. Howe and O. F. Spence.

Tex., San Antonio—Amusement Park.—Exposition Park & Amusement Co. incorporated with $60,000 capital stock; Walton D. Hood, president; H. H. Franks, first vice-president; W. W. Wharton, second vice-president; Millard W. Nahf, secretary and park manager; K. R. Martens, treasurer; awarded contract to Breining Construction Co. of Terre Haute, Ind., for construction of giant coaster, merry widow whirl, etc.; initial cost, $50,000; construction begun. (Recently noted.)

Va., Chester—Supplies.—Chesterfield Supply Co. incorporated with $10,000 capital stock; C. G. Lurton, president; R. H. Bruce, vice-president; Richelieu Hatcher, secretary-treasurer.

Va., Norton—Hardware.—Litton & Hurt Hardware Co. incorporated with $10,000 capital stock; J. W. Litton, president; C. F. Litten, vice-president; F. F. Hurt, secretary-treasurer.

Va., Richmond—Machinery and Supplies.—J. L. Lindsay (recently reported incorporated under "Foundry and Machine Shops" with $50,000 capital stock) has taken over old firm of J. L. Lindsay and will continue established plant; will not manufacture; I. B. Lindsay is president.

Va.-Tenn., Bristol — Publishing. — Bristol Herald-Courier, Frank Leake, manager, is planning erection of building.

W. Va., Bluefield—Printery.—Laird Printing Co., 70 Bland St. (recently noted incorporated with $5000 capital stock), will install machinery at cost of $2000 for commercial printing, calendars, etc.; R. C. McClaughrty, president; J. W. Laird, vice-president and manager; J. S. Kable, secretary; R. S. Thompson, treasurer.

W. Va., Hinton—Hardware.—Carden Hardware Co. incorporated with $5000 capital stock by O. H. Carden, G. L. Cyburn, E. Guy Carden and others.

W. Va., Huntington—Garage.—Central Motor Co. incorporated with $10,000 capital stock by C. H. Day, W. R. Kyger, G. H. Kyger and others.

W. Va., Wheeling—Vacuum Cleaners.—Hydraulic Vacuum Cleaning Co., 1138 Market St. (recently reported incorporated under "Miscellaneous Factories" with $25,000 capital stock), has agency for vacuum cleaner; will not manufacture; J. P. Hanley, president.

W. Va., Wellsburg—Creamery.—Wellsburg Dairy Products Co. incorporated with $10,000 capital stock by Carles Patterson, C. H. Robinson, L. M. Reffner and others.

MISCELLANEOUS FACTORIES

Ala., Anniston—Lime.—Anniston Lime Co. incorporated with $20,000 capital stock by A. J. Goodwin, J. W. Comer, Jr., and W. P. Acker.

Ala., Birmingham.—School Supplies, etc.—Bowen Seating & School Supply Co., 333 Hood Bldg., incorporated with $100,000 capital stock, succeeds T. H. Bowen Company and will continue manufacture of school specialties, public seating and supply business.

Ala., Birmingham—Disinfectants. — Standard Disinfecting Co., A. F. Stubbs, president, 120 S. 21st St. (recently reported incorporated with $12,000 capital stock), will manufacture full line of disinfectants; machinery in place; plans for erection of building not determined.

Ala., Birmingham.—Great Southern Automobile Co. (recently noted to increase capital stock to $500,000) plans no improvements further than those previously reported.

Ala., Corey, P. O. Birmingham—Gas Plant. Corey Land Co., Robert Jemison, Jr., president, Birmingham, awarded contract for installation of gas street-lighting system; plans call for 150 lights; 116-candle-power globes.

Ark., Helena—Gas Plant.—Helena Gas & Electric Co. incorporated with $300,000 capital stock by C. F. Fitzpatrick, James B. Miles, Leo J. Mondt and W. J. O'Brien.

Ark., Jonesboro—Creamery.—Hencke-Maddy Creamery Co. organized to establish creamery.

Ark., Texarkana—Brooms and Mops.—Texarkana Broom & Mop Co. incorporated with $100,000 capital stock; Q. O. Turner, president; E. Bricker, vice-president; J. W. Wiche, secretary-treasurer.

Ark., Little Rock.—E. C. Brice of Mansfield, Ark., is organizing company to manufacture cement shingles, bricks, etc.; cost $50,000; daily capacity, 3000 bricks.

Ark., Pine Bluff—Bottling.—Pine Bluff Bottling Co. reorganized with $25,000 capital stock; Lawrence Dixon, president; Joe C. Meyer, vice-president; Harry Hanf, secretary; Simon Bloom, treasurer; will continue established bottling plant.

Fla., Ybor City, Ind Sta., Tampa—Cigars.—Sanchez & Haya Company will rebuild portion of factory reported burned; loss $100,000.

Ga., Savannah—Hammocks, Cradles, etc.—Tapooskin Co. incorporated with $10,000 capital stock by John E. All, E. M. Brogden, D. C. Talbott and others; will manufacture hammocks, cradles, mattresses, quilts, etc.

Ky., Bowling Green—Grain Cleaners.—Kentucky Grain Cleaner Co. incorporated with $2000 capital stock by M. T. Hazelep, Charles Roemer and J. H. Roemer.

Ky., Louisville — Buggy and Automobile Equipment, etc.—W. H. Gillette Manufacturing Co. incorporated with $100,000 capital stock by W. H. Gillette, W. L. Gillette and C. H. Lambert.

Ky., Louisville—Distillery.—R. B. Grainger Distilling Co. incorporated with $2500 capital stock by R. B. Grainger, E. P. Farrington and A. M. Stork.

La., Lafayette—Cigars.—F. L. Shepard of Metropolis, Ill., will establish cigar factory on Jefferson St.

La., Mandeville—Creamery.—St. Tammany Butter & Creamery Co. of New Orleans, La., organized with $10,000 capital stock; John L. Lavell, president; J. M. Smith, vice-president; W. T. Newman, secretary; will establish creamery and sterilizing plant; install $3500 worth of machinery.

La., Many—Bottling.—Howell Adams of De Ridder, La., proposes establishment of bottling plant.

Md., Hyattsville—Aeroplanes.—Rex Smith Aeroplane Co. incorporated with $500,000 capital stock by C. A. M. Wells of Hyattsville, Rexford M. Smith and Victor J. Evans, both of Victor Bldg., Washington, D. C.

Md., Baltimore—Stokers.—Stineman Stoker Co. incorporated with $100,000 capital stock by Adam Roder and Chas. T. Wescott, both of 2141 Homewood Ave., Baltimore.

Md., Baltimore — Licorice. — J. S. Young, branch of McAndrew-Forbes Co., Boston and Elliott Sts., awarded contract to D. M. Andrews Company, 26th St. and Mt. Vernon Ave., Baltimore, for construction of addition to plant; two stories; brick; granite trimmed; slag roof; plumbing; plans by C. M. Anderson, 324 N. Charles St., Baltimore. (Previously mentioned.)

Md., Baltimore — Metallized Articles. — Maryland Metallizing Co., George M. Griffith, 441 Calvert Bldg., contemplates erection of plant for manufacture of metallized plaster of paris, wood or other substances.

Md., Baltimore—Candy.—Prudential Sweets Co. incorporated with $50,000 capital stock by A. Paul Brown, 409 W. Lombard St., and others.

Md., Frederick—Ice-cream, etc.—Charles F. Rothenhofer, 207 E. 7th St., will erect building 25x75 feet; brick and concrete; equip for cooling fresh milk immediately, pasteurizing and bottling same, and for manufacturing ice-cream; cold-storage machinery purchased; daily capacity 10 to 100 gallons of milk.

Miss., Jackson — Burial Vaults. — Capital Burial Vault Co. incorporated with $30,000 capital stock by G. H. Downey and N. J. Milstead.

Miss., McComb—Creamery.—Industrial department of Liberty-White Railroad, W. M. White, general manager, will establish creamery.

Mo., Jennings—Tools.—Acme Tool Co. incorporated with $150,000 capital stock by Wm. Klasing, Louis Klasing and J. F. Steiner.

Mo., Kansas City—Serum.—Imperial Serum Co. incorporated with $5000 capital stock by R. H. Alexander, William Hoffman and others.

Mo., Kansas City—Cartridge.—Sportsmen's International Cartridge Co. incorporated with $50,000 capital stock by L. A. Sherman, Harry E. Sherman, I. B. Nordyke and others.

Mo., St. Louis.—Miller-Ross Manufacturing Co. incorporated with $4000 capital stock by Robert B. Miller, Robert Ross and others.

Mo., St. Louis.—Eiseman-Kaufman Manufacturing Co. incorporated with $10,000 capital stock by Harry T. Eiseman, Wm. B. Eiseman and Jacob Kaufman.

Mo., St. Louis—Caps.—Modern Cap Manufacturing Co. incorporated with $25,000 capital stock by Abraham J. Novason, Frank Wentura and others.

Mo., St. Louis—Wearing Apparel.—Eisman-Kaufman Manufacturing Co. incorporated with $10,000 capital stock by William B. Eisman, Harry F. Eisman and Jacob Kaufman.

Mo., St. Louis—Cider and Vinegar.—Avis Cider & Vinegar Co. incorporated with $25,000 capital stock by Wm. H. Avis, Harry C. Avis and others.

Mo., S. Louis—Wearing Apparel.—Miller-Ross Manufacturing Co. incorporated with $4000 capital stock by Robert Ross of St. Louis, Robert B. Miller of Excelsior Springs, Mo., and others.

Mo., St. Louis—Automobile Parts.—General Novelty Manufacturing Co. incorporated with $15,000 capital stock by Frank Bishop, Donald H. C. O'Neil and H. C. Barker.

Mo., St. Louis—Skirts.—Hirshfield Skirt Co. (recently reported incorporated with $12,000 capital stock) will not erect building; E. Hirshfield, president; M. H. Fixel, vice-president; Joseph Laskowitz, secretary-treasurer.

N. C., Wilmington — Drugs. — Southside Drug Co. incorporated with $10,000 capital stock by Charles T. Harper, Carl T. Harper and Jessie G. Harper.

N. C., Siloam — Lime. — A. F. Messick of Winston-Salem, N. C., organized company to develop lime rock near Siloam; will install crushers, etc., and manufacture agricultural lime, building lime, etc.

Okla., Ardmore—Creamery.—Ardmore Ice-Cream & Creamery Co. will establish creamery; will open bids April 1 for erection of 46x70-foot concrete and brick building; cost $2000; cost of machinery, $7000; main office address, Sulphur, Okla. Recently noted to be established by Paul G. Liebmann.)

Okla., Enid—Candy.—Enid Wholesale Candy Co. incorporated with $10,000 capital stock by J. O. Davidson, F. O. Davidson and O. V. Field.

Okla., Kiefer.—D. W. Franchot & Co. will establish gasoline plant; daily capacity, 700 gallons of gasoline; cost $9000.

Okla., Oklahoma City—Medicine.—X-Z-Ma-Ko-Co incorporated with $5000 capital stock by N. S. Darling, L. S. Darling and G. O. Woodworth.

Okla., Pawhuska — Glass. — James McKittrick and associates of Sandusky, O., will establish 30-blower window-glass factory; cost $45,000; construction begun.

Tenn., Chattanooga — Phonographs, etc. Chattanooga Multiplex Phonograph Co. (recently reported incorporated with $40,000 capital stock) organized with D. W. Hughes, president, of Chattanooga; C. S. Goodwin, vice-president, of Birmingham, Ala.; Wm. F. Neil, secretary-treasurer; D. T. Blakey, general manager, both of Chattanooga; will acquire building and equip for manufacture of multiplex phonographs; plans to later manufacture moving pictures, picture films and machines.

Tenn., Chattanooga—Rubber Tires.—Chattanooga Rubber Tire Works incorporated with $5000 capital stock by W. A. Dewees, Jr., T. O. Selmar, Sidney Scott and others; will continue established plant.

Tenn., Greenville — Brooms. — Greenville Broom Factory, P. E. Cox, secretary, will establish plant.

Tenn., Johnson City—Textile Supplies, etc. Hice Manufacturing Co., S. M. Hamrick, president, will erect 50x150-foot building; mill construction; cost $2000; will install woodworking machinery to manufacture bent rims and textile supplies; cost $6000.

Tenn., Memphis — Bakery. — E. H. Travis of New York has closed negotiations with Business Men's Club for organization of Memphis Biscuit Co. with $500,000 capital stock; will erect building 320x497 feet; 400,000 feet of floor space; reinforced concrete; install machinery for manufacturing biscuits, cakes, crackers, etc.

Tenn., Nashville—Cigars.—Hawkes & Dahin, 618 Commerce St., organized by William Hawkes and John S. Dahin; will establish cigar factory.

Tenn., Nashville—Adding Machines.—Chas. Wales, Sixteenth Ave. and Hawkins St., is organizing company to establish plant for manufacturing adding machines.

Tex., Rosenberg — Creamery. — Rosenberg Creamery Co., recently reported incorporated with $5000 capital stock, is proceeding with erection of plant; 30x45 feet; cost of building and machinery, $2500; W. J. Meininger, president and treasurer; R. H. Lane, secretary.

Tex., Cisco—Creamery.—Cisco Creamery Co. incorporated with $7500 capital stock by A. H. Johnson, G. W. Daniel, G. D. Ward and others.

Tex., Dallas—Automobile Specialties.—Texas Auto Specialty Co. incorporated with $25,000 capital stock by L. L. Lane, H. H. Moore and Jennings M. Moore.

Tex., Dallas—Ice-cream. — Acme Ice-cream Co. incorporated with $3000 capital stock by F. B. Lockert, E. F. Cunningham and A. C. Stiles.

Tex., Greenville — Brooms. — Greenville Broom Manufacturing Co. increased capital stock from $2600 to $7500.

Tex., Houston.—South Texas Manufacturing Co. incorporated with $300,000 capital stock by R. P. Christian, E. T. Dickson, J. W. Lockett and others.

Tex., Plainview—Gas Plant.—H. E. Powell of Springfield, Ill., and associates will establish gas plant; applied for franchise to establish distributing system.

Tex., Victoria—Safes and Locks.—Victoria Safe & Lock Co. awarded contract to Acre & Nieman, Victoria, for factory; main building 40x140 feet; foundry 24x75 feet; galvanized iron; cost $5800. (Recently noted.)

Tex., Waco — Gas Plant. — Waco Gas Co. awarded contract for erection of addition to gas works to provide reserve capacity of more than 2000 horse-power; fireproof; concrete construction; equipment purchased.

Tex., Waskom.—P. B. Barlow will establish plant to manufacture cheese; erect 22x40-foot one-story building; daily capacity, 500 pounds fall cream cheese. (Recently incompletely reported.)

Va., Alexandria—Oil Refinery.—Pompeian Company incorporated with $100,000 capital stock; Nathan Musher, president and treasurer, 826 9th St. N. W.; S. A. Gatti, vice-president; Milton Strasburg, secretary, all of Washington, D. C.

Va., Newport News—Brewing.—Hoster-Columbus Associated Breweries will erect two-story brick building.

Va., Norfolk—Corrugated Paper. — Corrugated Paper Co. incorporated with $25,000 capital stock; W. D. Hemingway, president; J. S. Heller, vice-president; Samuel Linthicum, secretary; awarded contract to F. D. Meisden, Norfolk, for erection of 150x40-foot building; cost of machinery, $8000; will manufacture corrugated packages of all kinds.

Va., Norfolk — Cider, etc. — Co-operative Fruit Juice Corporation incorporated with $25,000 capital stock; R. L. Wharton, president; T. C. Pool, vice-president; E. P. Champlin, secretary-treasurer.

Va., Richmond—Bakery.—Nolde Bros. will erect two-story brick bakery; cost $12,200.

Va., Richmond—Street Signs.—Virginia Patent Sales Corporation, 208 Commonwealth Bank Bldg. (recently reported incorporated with $100,000 capital), has no plant; will manufacture street signs by contract; J. N. Purcell is president.

Va., Roanoke—Paint.—W. E. Kinsey and Abell Shelor of Rapid Transit Development Co., New York, will establish plant to manufacture paint. (See "Mining," Va., Pulaski.)

W. Va., Bluefield—Gas Plant. — J. Elliott Hall purchased gas franchise and rights of Bluefield Gas & Fuel Co. and will, it is reported, erect larger plant than previously noted to be erected by selling company; previous report was $25,000 for plant and appliances and $30,000 for mains.

W. Va., Huntington—Calendars, etc.—John H. Vaden is interested in organization of company to manufacture calendars and advertising novelties. (See "Machinery, etc., Wanted.")

W. Va., Wheeling—Gasoline.—International Petrol Co. organized with $100,000 capital stock; J. C. McDowell, president, Pittsburg, Pa.; Colin H. Livingston, vice-president, Washington, D. C.; Chas. R. Burk, secretary and general manager; will establish plant to manufacture gasoline from natural gas.

ROAD AND STREET WORK

Ala., Attalla.—City will lay sidewalks and sewers on Hughes Ave. Address The Mayor.

Ark., Earl.—Good Roads Improvement Association will be organized for construction of road, 70 miles long, from Augusta to Mound City, passing through Augusta, McCrory, Wynne, Parkin, Smithdale, Earl, Crawfordsville, Vincent, Ebony, Marion to Mound City; road will be built of gravel or some other suitable material; estimated cost, $2000 per mile; proposed to petition Legislature for authority to issue bonds; H. F. Avers and Albert Horner are president and secretary, respectively, of Crittenden county branch of association, and similar organizations are to be perfected in Cross and Woodruff counties, through which the road will pass.

Ga., Augusta.—City awarded contracts for curbing and cement sidewalks and driveways which may be ordered by City Council during 1911 as follows: William F. Bowe of Au-

gusta for curbing at 34 cents per linear foot for straight curbing and 45 cents per linear foot for round curbing; to A. A. Hett & Co. of Augusta for cement sidewalks and driveways at 9½ cents per square foot for sidewalks and 5½ cents per square foot for driveways; Nisbet Wingfield, City Engineer. (Recently mentioned.)

Ga., Macon.—City paving work on 2d, 4th and other streets (recently noted awarded to W. M. Lasley of Macon) will be completed by Southern Paving Construction Co., First National Bank Bldg., Chattanooga, Tenn., Mr. Lasley having transferred the work to latter company; contract was awarded last May; total yardage, 47,500 square yards, 7000 square yards being finished; 12,000 square yards yet to be constructed.

Ga., Macon.—City Council will consider paving of Vineville Ave.; Eden Taylor, Jr., chairman committee on streets and sidewalks.

Ky., Louisville.—City will reconstruct with granite section of levee from Fourth Ave. to 6th St.; cost $5000; Frank Dugan, wharfmaster.

Ky., Louisville.—City will construct 4000 linear feet of asphalt pavement, 34 feet wide, with vitrified-block gutters; cost $40,000; date of opening bids not set; D. R. Lyman, chief engineer. (Recently noted.)

La., New Orleans.—City awarded contract to Roach & Manigan, Memphis, Tenn., at about $18,000 for laying about 6000 yards of asphalt paving.

La., New Iberia.—City is considering street paving. Address The Mayor.

Miss., Mendenhall.—Road bonds (recently noted authorized) will be for improvements for which contract has been awarded; J. F. Thames, clerk.

Miss., New Albany.—Union county road improvements (recently noted) will be on approximately 300 miles; roads to be of first, second and third class, sand-clay mixture; survey now in progress; bids probably opened first Monday in April; B. A. Webb, highway engineer Union County Road Commission, in charge; county voted $50,000 for road improvements.

Okla., Hugo.—City will expend $120,000 to construct two miles of pavement; material to be used not determined; H. C. Blanchard, engineer in charge; L. E. Griffith, assistant engineer. (Recently noted.)

Okla., Oklahoma City.—City will pave with sheet asphalt, grade, etc., Exchange Ave. from Pennsylvania Ave. to Kentucky Ave.; double driveway, each to be 25 feet wide; five-inch concrete base, 6x18-inch concrete curb and three-foot vitrified-brick gutters; will also grade Markwell and College Sts. from Cottonwood to Catalpa Ave., Ave. C from Higgins to Blackwelder Ave., Broadway from Ave. E to Ave. G, Ave. F from Robinson Ave. to Shield's Blvd., etc.; bids will be received until February 13; Bob Parman, City Clerk. (See "Machinery, etc., Wanted.")

Okla., Sapulpa.—City will construct 16,000 square yards sheet asphalt pavement on five-inch concrete base, including grading, curbing, draining, etc.; bids will be received until February 4; Ira J. Anderson, City Clerk. (See "Machinery Wanted.")

S. C., Aiken.—City will construct about 600 feet by 300 feet of vitrified-brick pavement; W. C. Hyer, member of street committee. (Recently noted.)

S. C., Spartanburg.—City will petition Legislature for authority to issue $50,000 of bonds for street improvements and construction of sewer system. Address The Mayor.

Tenn., Germantown.—City petitioned Legislature for authority to issue $3000 of bonds for street paving and electric-light plant. Address The Mayor.

Tenn., Newport.—Cocke County Pike Commission, George W. Gorrell, secretary, awarded contract to T. L. Peters and J. R. Gibson, Knoxville, Tenn., to grade about 18 miles and macadamize about 35 miles of roads; estimated cost, $100,000; contract is for completion of work undertaken by another firm. (Recently mentioned.)

Tex., Aransas Pass.—City will improve streets; material to be used will be mud shell taken from shallow adjacent bays by suction dredge; W. H. Vernon, Mayor. (Recently noted to have voted issuance of $20,000 of bonds.)

Tex., Austin.—Travis County Commissioners contemplate expending about $2000 in repairing and extending Manor Rd. distance of about one and a half miles; road is to be graveled.

Tex., Dallas.—City will improve Hickory St. from Harwood to Chestnut St.; bids will be received until February 6; J. B. Winslett, City Secretary. (See "Machinery Wanted.")

Tex., Fort Worth.—City Commission awarded contract to Roach & Manigan, Memphis, Tenn., at about $450,000 for laying 225,000 square yards of asphalt paving. (Recently incompletely mentioned.)

Tex., Kountze.—Hardin county voted $100,000 bond issue for road construction. Address County Commissioners. (Recently mentioned.)

Va., Newport News.—Virginia Peninsula Good Roads Association organized to promote construction of 88 miles of sand-clay road from Hampton Roads to Richmond, with branches from Williamsburg to Yorktown and Jamestown, Va.; 30 miles have practically been completed; Henrick, New Kent, James City, York and Warwick counties will be petitioned to contribute to cost; road has been platted half way and measured entire distance; ferry system will be established at Newport News, across Hampton Roads, about four miles to Sewells Point, connecting with Jamestown Blvd. into Norfolk; Frank W. Darling, president; H. T. Woods, first vice-president; W. E. Cottrell, secretary; George F. Adams, treasurer.

Va., Norfolk.—City will pave Denby St. with old material now on site; about 1800 square yards paving and 1500 linear feet curb setting; U. S. Sands of Norfolk is lowest bidder at 46 cents per square yard for paving and 8 cents per linear foot for curbing; W. T. Brooke, City Engineer.

Va., Norfolk.—R. C. Hollyday, chief Bureau of Yards and Docks, Washington, D. C., will receive bids until February 11 for paving at Navy-yard. (See "Machinery Wanted.")

Va., Spottsylvania.—Spottsylvania County Board of Public Road Commissioners will construct macadamized road from Spottsylvania to Gayle's Bridge, distance of about one and a half miles; specifications submitted to bidders.

Va., Portsmouth.—Norfolk county will construct macadam roadway on Glasgow St. from city of Portsmouth in southwardly direction and for extension of macadam roadway on Great Bridge Rd. east of Great Bridge; bids will be received until February 6; Alvah H. Martin, chairman Permanent Road Improvement Commission; P. St. J. Wilson, State Highway Commissioner, Richmond, Va. (See "Machinery Wanted.")

SEWER CONSTRUCTION

Ala., Attalla.—City will lay sewer on Hughes Ave. Address The Mayor.

Ga., Atlanta.—City contemplates expending $250,000 during 1911 for lateral sewers in addition to part of $1,300,000 of bond issue provided for sewer work; work is to be done by contract under supervision of sewer committee, Aldine Chamlers, chairman, and of R. M. Clayton, chief of construction.

Ga., Augusta.—City awarded contract to I. G. Brittingham of Augusta for laying sewer piping of all sizes which may be ordered by City Council during 1911; Nisbet Wingfield, City Engineer. (Recently mentioned.)

La., Donaldsonville.—City is considering construction of sewer system; authorized Mayor Maurin to employ engineer to ascertain cost.

La., Hammond.—Sewerage committee submitted report to City Council estimating that proposed sewer system will comprise 33,480 feet of sewers and cost $28,350; estimate includes 16,480 feet of 8-inch pipe, 6000 feet of 10-inch, 6000 feet of 12-inch and 5000 feet of 15-inch pipe. (Recently mentioned.)

La., New Iberia.—City is considering construction of sewer system. Address The Mayor.

Md., Easton.—City will construct several miles of sewers with two disposal plants; also sewerage tanks and disinfecting apparatus; cost $43,000; Clyde Potts, 30 Church St., New York, engineer in charge. (Recently noted to vote on issuance of $40,000 of bonds.)

Mo., St. Louis.—Board of Public Improvements, Room 300 New City Hall, will receive bids until February 3 for construction of Baden public sewer, second section. (See "Machinery Wanted.")

Okla., Cherokee.—City votes January 31 on issuance of $5000 of bonds for sewage-disposal plant and water-works extension. Address The Mayor.

S. C., Spartanburg.—City will petition Legislature for authority to issue $50,000 of bonds for construction of sewer system and street improvements. Address The Mayor.

Tex., Houston.—City Council has approved construction of three sewers—Calhoun avenue storm sewer, Second Ward pumping main and enlargement of Washington avenue-Decatur street storm sewer, according to plans submitted by Frank L. Dormant, consulting engineer of Houston; Calhoun avenue storm sewer plans call for storm sewer varying in width from 36 to 72 inches, and extending across city from Bagby St. to east end of city, over San Antonio and Aransas Pass yards to St. Charles St.; connections will be made from both directions with Austin street storm sewer; bids for construction will soon be invited. Second Ward pumping main will extend from Scott St., near city limits, 4½ miles diagonally to proposed filtering beds near Sims Bayou, on 200-acre tract purchased last summer by city; plans call for depositing of sewerage in reservoir at intersection of Scott St. and eastern city limits, where pumping station will be built; centrifugal pumps to be installed in station will force sewerage through 4½ miles of mains to filtration beds near Sims Bayou; estimated cost $150,000. Washington avenue-Decatur street storm sewer will be enlarged to drain depression east of Glenwood Cemetery.

TELEPHONE SYSTEMS

Ga., Blanton.—R. R. Black, J. J. Howell, R. T. Carter and others are interested in construction of telephone system from Blanton to Valdosta, Ga.

Ga., Dalton.—Dalton Telephone Co. will make improvements to system, including installation of cable to replace wires.

Ga., Gainesville.—Gainesville & Oakwood Telephone Co. incorporated by G. T. Cook and others.

Ga., Gay.—Company organized with C. D. Freeman, general manager, Americus, Ga.; will establish telephone system.

Ga., Valdosta.—Blanton Rural Telephone Co., Blanton, Ga., will construct 10 miles of rural telephone line from Valdosta to Blanton and install equipment. (See "Machinery Wanted.")

Ky., Clarkson.—Walnut Hill Telephone Co. incorporated by T. C. Witten, J. H. Bratcher and others.

Miss., Johns.—Johns Telephone Co. incorporated by H. C. Patrick, J. C. Crain and others.

Mo., Mt. Vernon.—Mt. Vernon Telephone Co. incorporated with $6000 capital stock by John M. Allen, Henry McCanz, Norman Smith and others.

Okla., Hobart.—Twin Elk Telephone Line incorporated by T. J. Hedrick, D. W. Beaver and E. B. Salisbury.

Okla., Hooker.—Farmers' Mutual Telephone Co. incorporated with $1500 capital stock by E. D. Hubbard, J. S. Wallace, C. E. Adams and others.

Okla., Lone Tree.—Lone Tree Telephone Co. incorporated by G. C. Rhoades, E. C. Slade and E. E. Wilmint.

Okla., Lone Wolf.—Lone Wolf Rural Telephone Co. incorporated by Cash McIlwain, E. Reichart and T. B. Whiteside.

S. C., Chesterfield.—Chesterfield Telephone & Telegraph Co., B. R. Tindal, will increase capital stock to $6000 and make improvements.

S. C., Greenville.—Southern Bell Telephone & Telegraph Co., Atlanta, Ga., will soon begin construction of telephone exchange; central energy system; steel and concrete; fireproof construction; three or four stories; auxiliary gasoline engine and emergency plant in basement.

Tex., Houston.—Southwestern Telephone & Telegraph Co.'s recently noted improvements will include stringing additional copper wires between Houston and Eagle Lake, 60 miles; Humble, 18 miles; Dayton, 34 miles; will increase long-distance facilities by placing additional copper strands between Alvin and Liverpool, 115 miles; Bay City and Brazoria, 25 miles; also place additional line between San Antonio and Austin; will construct lines between San Antonio and Pearsall, 53 miles; New Braunfels, 32 miles; Sabinal, 71 miles; Schertz, 16 miles; Seguin, 34 miles. (Recent report stated company will expend $600,000 for improvements.)

Va., Clifton Forge.—Chesapeake & Ohio Railroad, F. I. Cabell, chief engineer, Richmond, Va., will install telephone control system on main line between Clifton Forge and Charlottesville, between Charlottesvile and Richmond and Richmond and Fort Monroe; 545 miles with 154 stations now completed; entire system to be 992 miles and 248 telephone way stations, and will operate from Fort Monroe, Va., and Cincinnati, O.; has awarded contracts.

Va., Nickelsville.—Dungannon & Nickelsville Telephone Co. incorporated with $5000 capital stock; J. W. Broadwater, president; J. J. Quillin, vice-president.

Va., Shawsville.—North Fork & Bradshaw Telephone Co. incorporated with $5000 capital stock; F. T. Sesler, president; S. W. Kenzie, vice-president; G. C. Bain, secretary-treasurer.

W. Va., Cliff Top.—North Fayette Telephone Co. (recently reported incorporated with $5000 capital stock by R. L. Walker and others) has begun construction of (about) 30-mile telephone line; machinery and supplies purchased; H. J. Dickerson, Ravens Eye, W. Va., engineer in charge; plans for exchange not yet determined.

TEXTILE MILLS

N. C., Rutherfordton—Cotton Yarns.—Cleghorn Mills Co. will increase capital stock by $25,000 to purchase new machinery; now has 6240 ring spindles, 3014 twister spindles, etc.

N. C., Lexington—Fine Cloth.—O. A. Robbins of Charlotte, N. C.; George W. Montcastle of Lexington and Fall River (Mass.) capitalists will organize company with $500,000 capital stock to build mill of 20,000 spindles and 400 looms; now determining details. (Previously mentioned.)

Tex., Paris—Cotton Goods.—Paris Progressive Club contemplates arranging for erection of cotton mill.

WATER-WORKS

Ala., Dothan.—City will install water-works and electric plant; erect building large enough to install machinery for city of 50,000 population; construct 1,000,000-gallon reservoir, one or more additional artesian wells, new pumping units and boilers complete; electrical equipment will probably include 500-kilowatt Corliss driven unit, switchboards, etc; R. W. Lisenby, clerk.

Ga., Dalton.—City will receive bids until February 23 for furnishing material and making extension to water-works and electric-light plant; H. S. Jaudon Engineering Co., Box 582, Savannah, Ga., engineer in charge. (Recently noted. See "Machinery Wanted.")

Ga., Doerun.—City will open bids February 15 for construction of water-works; cost $6500; plans not made; engineer not engaged; James L. Dowling, Mayor. (Recently noted to have voted $6500 bond issue. See "Machinery Wanted.")

Ky., Earlington.—St. Bernard Mining Co. will extend water-works, moving reservoir to location 45 feet above present one; construct 200,000-gallon concrete reservoir; install 2200 feet 8-inch and 1000 feet 4-inch cast-iron pipe; Frank D. Rash, general manager, is preparing plans and will engineer construction. (Recently noted.)

La., Many.—Many Ice, Water & Light Co. organized with $12,000 capital stock to construct water-works, electric-light system and ice plant. W. C. Roaten is president; J. H. Boone, vice-president; Rich Frazer, secretary; W. H. Vandegear, treasurer. (Recently mentioned.)

La., Donaldsonville.—City is considering construction of 1000-foot extension of water-works system to Lemann Annex; authorized Mayor Maurin to advertise for bids to ascertain cost.

Md., Baltimore.—Alfred M. Quick, Water Engineer, has been instructed to prepare specifications for triple-expansion vertical pump to be installed in Mount Royal station for taking water from low-service reservoirs to high-service lakes; capacity, 30,000,000 gallons; cost, with boilers, about $200,000; will be built out of $5,000,000 water loan.

Mo., Columbia.—City will have plans and specifications prepared by H. B. Shaw of Columbia for drilling two deep wells.

Mo., Webb City.—Webb City & Carterville Water Co. will construct reinforced concrete reservoir; capacity, 1,500,000 gallons; bids will be opened about February 14; plans at company's office.

N. C., Reidsville.—City contemplates construction of water plant; E. W. Myers, City Engineer of Greensboro, N. C., recommends to Town Commissioners construction of plant at Troublesome Creek and estimates cost at $42,500.

Okla., Cherokee.—City votes January 31 on issuance of $5000 of bonds for water-works extension and sewage-disposal plant. Address The Mayor.

Okla., Guthrie.—City will make extension to water-works; install new main from pumphouse to center of city, air manifold system, pressure blower and wash-water pump and clear well for improvement of filtration plant; contracts for equipment awarded; cost $25,000; construction by city's force; E. B. Hocker, engineer in charge; W. S. Spencer, Water Commissioner. (Appropriation of $20,000 recently noted.)

Okla., Haskell.—City voted issuance of $25,000 of bonds for construction of water-works. Address The Mayor.

Okla., Snyder.—City will vote February 7 on issuance of $15,000 of bonds for enlarge-

ment and extension of water-works. Address The Mayor.

S. C., Charleston.—City has engaged Rudolph Herring, engineer, of New York, to investigate construction of water-works and submit recommendations with estimate of cost.

Tenn., Tellico Plains.—City is having plans and specifications prepared by Chisolm & Osborne, Realty Bldg., Charlotte, N. C., for water-works; bonds issued.

Tenn., Johnson City.—City has ordered

Tenn., Dayton.—City is considering construction of water-works; K. McNenson, Mayor.

purchase and laying of 16-inch cast-iron pipe line 11 miles long; 600-foot fall in the 11 miles; contract awarded to W. C. Swanwick, Joplin, Mo.; cost about $150,000; contract for pipe and other materials awarded.

Tenn., Kingsport.—City is having plans prepared for construction of water-works. Address The Mayor.

Tenn., Kenton.—City contemplates water-works construction; opened bids January 25 for furnishing cast-iron water pipe and specials, steel tower and tank, gasoline engine and pump, etc.; R. C. Huston, consulting engineer, 1719 Central Bank Bldg., Memphis, Tenn.; M. C. Rossorl, Recorder.

Tex., Kirbyville.—J. W. Fleming and J. Morton are considering, it is reported, construction of water-works.

Tex., Aransas Pass.—City will construct water-works; supply to come from well 305 feet deep; contemplates construction of 60,000 gallon steel tank with 100-foot elevation; will use 2000 feet of 6-inch and several feet of 4-inch pipe; fire plugs will be installed in business and residence sections; W. H. Vernen, Mayor. (Recently noted to have voted issuance of $25,000 of bonds.)

Tex., Lott.—City will construct water-works. Address The Mayor.

Tex., Lometa.—J. E. Baker, Killeen, Tex., purchased water-works and will improve.

Tex., Sinton.—Sinton Townsite Co. will construct water-works; has contracted for artesian well.

Va., Norfolk.—Finance Committee approved appropriation of $50,000 to continue water-meter system; W. T. Brooke, City Engineer. (Recently mentioned.)

W. Va., Parkersburg.—Board of Affairs, C. P. Morrison, president, will receive bids until February 23 for furnishing and installing system of plumbing and steam heating and for furnishing and erecting steel standpipe in connection with construction of new water supply; Samuel M. Gray, 930 Banigan Bldg., Providence, R. I., is consulting engineer; Frank Good, City Auditor. (See "Machinery Wanted.")

WOODWORKING PLANTS

Ark., Little Rock—Paving Blocks.—Ayer & Lord Tie Co., Chicago, Ill., and Memphis, Tenn., will establish plant for manufacturing creosoted paving blocks.

Ark., Waldo—Staves.—Gulf Cooperage Co. will build stave mill.

Ark., Marked Tree—Staves.—Woodruff-Kroy Company will install additional machinery in stave factory.

La., Ferriday—Hoops.—Ferriday Hoop Co., J. E. Ormsby, manager, will establissh hoop factory recently noted; building erected; cost of machinery $5500; daily output 60,000 coiled elm hoops; contemplate erection of additional mill. (See "Machinery Wanted.")

Mo., Brandsville—Flooring, etc.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, will install machinery to manufacture tongue and groove oak flooring and to work up short pieces for commercial uses, such as chair and table legs, etc. (See "Lumber-Manufacturing Plants" and "Machinery Wanted.")

N. C., Statesville—Furniture.—Crawford-Kennedy Furniture Co. incorporated with $50,000 capital stock by Charles P. Crawford, P. D. Kennedy and F. B. Bunch.

N. C., Lexington—Chairs.—Lexington Chair Co., F. S. Lambeth, president, will operate plant recently noted purchased from Oneida Chair Co.; buildings erected; no further equipment needed.

N. C., Wilmington.—Camp Manufacturing Co., owner of Angola Lumber Co.'s plant, will, it is reported, establish manufacturing plant.

N. C., Winston-Salem—Furniture.—Williard & Ader Furniture Co. incorporated with $25,000 capital stock by S. H. Ader, George F. Williams and John S. Hege.

Tenn., Chattanooga—Furniture.—Chattanooga Furniture Co. awarded contract to Evans & Schneider, James Bldg., Chattanooga, for erection of three-story brick building; composition roof; gas and electric lighting; cost $9000.

Tenn., Jackson—Furniture.—T. E. Lindsay Manufacturing Co. incorporated with $15,000 capital stock by T. E. Lindsay, E. G. Parish, Paul Baldridge and L. L. Tonville.

Tex., Dallas—Furniture.—Rick Furniture Co. incorporated with $100,000 capital stock by Albert C. Rick, E. P. West and Charles Ball.

Va., Lynchburg—Wagons.—Thornhill Wagon Works has about completed plans for factory buildings; main building will be one story; floor space, 600x100 feet; mill construction; will be equipped with sprinkling devices; in addition to main building, several smaller structures will be erected, giving new plant twice floor space of burned factory. (Recently mentioned.)

Va., Staunton—Barrels.—W. H. Sanford, Zanesville, O., will establish factory with capacity of 2500 to 3000 barrels daily.

W. Va., Parkersburg—Handles.—American Handle Co. incorporated with $25,000 capital stock by Samuel B. Stiles, John Marshall, Harry O. Steiner and others.

BURNED

Ala., Birmingham.—R. E. Cooper's residence; loss $4000.

Ala., Birmingham.—B. M. Allen's building at 1922 Third Ave.; loss $10,000.

Ala., Birmingham.—Henry B. Gray's Southside skating rink at Ave. F and 24th St.

Ala., Maplesville.—R. H. Martin's store, loss about $4000; Dunsky & Merchant's store.

Ark., Clarksville.—E. J. Connell's electric-light plant, planing mill and portion of lumber yard, loss $35,000; H. P. Owens' store, loss $5000; H. H. Elliott's store, loss $3000; John Shuth's blacksmith shop, loss $1800.

Ala., Demopolis.—Garber Bros.' dry kiln.

Ark., Hazen.—Public school; loss $6000. Address The Mayor.

Ark., Monticello.—Municipal electric-power plant; loss about $15,000. Address The Mayor.

Fla., Marianna.—Reform School's barn.

Fla., Ybor City, Ind. Sta. Tampa.—Sanchez & Haya Co.'s cigar factory damaged; loss, $100,000.

Ga., Americus.—Farmers' Oil Co.'s linting department; loss $3000 to $4000.

Ga., Milledgeville.—Geo. F. Edwards' residence; loss $2500.

Ky., Gravel Switch.—William Weatherford's store and warehouse; loss $8000.

Ky., Lancaster.—Virgil Gastineau's tobacco barn.

La., Hammond.—Thomas Myland's residence.

La., New Orleans.—Crescent Felt Mattress Co.'s plant at 601-07 S. Peters St.; loss $15,000.

Md., Arlington.—Howard Pindell's residence on Woodland Ave. between Homer Ave. and Old Reisterstown Rd.; owned by Mrs. Alice Russell; loss on building, $3000.

Md., Fullerton.—John Fitz's residence on Fitz Ave., near Fullerton; loss $3000.

Md., Gaithersburg.—Fairview Seminary; building owned by Thomas I. Fulks and J. B. Diamond; loss $9000.

Md., Lutherville.—Maryland College for Women administration building; owned by Charles W. Gallagher; loss $125,000.

Miss., Columbia.—C. Hathorn's residence; loss $3000.

Miss., Vicksburg.—H. Y. Wilson's residence; loss $3000.

Mo., Kansas City—Kansas City Hay Press Co.'s plant at 8th and Mill Sts.; loss $25,000; E. C. Sooy is president.

Mo., Lewistown.—Citizen's Telephone exchange; Rubb-Bragg Grocery Co.'s store; loss $100,000.

N. C., Lillington.—Harnett Reporter's plant; loss $2000.

Okla., Drummond.—Winfield Company's mill and elevator; loss $20,000.

Okla., Drummond.—Winfield Mill & Elevator Co.'s mill and elevator; loss, $20,000.

Okla., Hennessey.—Christian church building and parsonage; loss $6000. Address The Pastor, Christian Church.

S. C., Salley.—O. L. Camp's building; L. Bennett's millinery store; J. E. Johnson's store; H. S. Cooper's store and dwelling; loss, $10,000 to $12,000.

S. C., Talatha.—Sullivan Johnson's cotton gin.

S. C., Spartanburg.—George Heinitsh's building, loss $3000; Glenn Building damaged; Bank of Commerce building damaged.

S. C., Summerton.—Summerton Mercantile Co.'s cotton gin; loss $10,000.

Tenn., Dandridge.—Gass & Nichols' building, loss $11,000; Adrian Felknor's store, loss $3500.

Tenn., Fayetteville.—Smith Grain Co.'s cob mill and warehouse No. 2; loss about $15,000.

Tenn., Union City.—Naylor Furniture Co.'s store; loss on building, owned by Mr. Shelton, $5000.

Tenn., Waverly.—William Crockett's residence; loss $3000.

Tex., Bonham.—Planters' Oil Mill's hullhouse; loss, $7000.

Tex., Ennis.—John P. Boren's cotton gin and buildings; loss $11,000.

Tex., Gainesville.—Arthur McCann's residence; loss $5000.

Tex., McGregor.—Sales Hotel, loss $5000; McGregor Steam Laundry, loss $2500.

Tex., San Antonio.—Dr. E. W. Wright's sanitarium; loss, $10,500.

Tex., Waxahachie.—John P. Boren's cotton gin, seed and cotton houses; loss $12,000.

Va., Culpeper.—Skating rink owned by Rudersill & Johnson, Front Royal, Va.; loss $4000; William Yager's residence.

Va., Portsmouth.—B. F. Ferbee's grocery store; loss on building, owned by D. W. Todd, $2500.

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

D. C., Washington.—Beverly J. Smith, Jr., 1753 Park Rd. N. W., has plans by B. Stanley Simmons, 931 F St. N. W., Washington, for apartment-house at Cathedral Ave. and Woodley Lane N. W.; six stories; 41 suites; fireproof construction; cost, $125,000 to $150,000.

Ga., Rome.—J. G. Hunt will erect apartment-house to replace Buena Vista Hotel; brick. Address care of Sam Lowery, Atlanta, Ga.

Md., Baltimore.—Sam Zito has plans by Silvio Tosi, 410 N. Gilmor St., Baltimore, for store and apartment-house at 2581 W. Baltimore St.; brick, three stories; cost $10,000.

N. C., Charlotte.—C. M. Bridgers will erect brick apartment-house.

S. C., Columbia.—Ernest G. Cook will open bids February 20 for erection of apartment-house, contract for which was recently incorrectly noted awarded; 12 apartments; 54 rooms, including baths and kitchens; ordinary brick construction; hot-water heat; gas and electric lighting; cost, $16,000; plans by James B. Urquhart, Columbia; will receive bids on all kinds of building materials and machinery. (See "Machinery Wanted.")

Tenn., Knoxville.—B. H. Sprankle is having plans prepared by W. H. Gildard, Knoxville, for apartment and office building; 12 stories; steel and buff pressed brick; Tennessee marble trimmings; 125x75 feet; first floor will be 15 feet high; for offices; hall, 10 feet wide; freight and two passenger elevators; roof garden with skeleton roof; fireproof construction; cost, $100,000.

Tenn., Memphis.—Union Investment Co. will erect apartment house; six stories; 80x37½ feet.

W. Va., Fairmont.—Terrace Apartment Co. incorporated with $30,000 capital stock by J. T. Hill, I. N. Morgan, M. R. Fantz and others.

W. Va., Parkersburg.—W. W. Jackson will erect store and apartment building; three stories; brick; 135x150 feet; first floor for stores; upper floors for apartments.

ASSOCIATION AND FRATERNAL

Ky., Louisville.—Young Men's Christian Association will have plans prepared by Kenneth McDonald and W. J. Dodd, Louisville, for building to cost about $350,000. (Previously noted.)

S. C., Spartanburg—Printery.—Spartanburg Printing Co. will be incorporated by Rev. S. A. Nettles (president), H. J. Dockendorf and others; will acquire plant of Dockendorf & Co. and install additional machinery, including linotype machine and press, and operate.

Tenn., Tullahoma.—Knights of Pythias, W. D. Fox, grand keeper of records and seals, Chattanooga, Tenn., plan issuance of $25,000 worth of bonds for improvements at orphanage, including erection of 35 or 40 cottages, construction of 15-acre lake to be stocked with fish, etc.

Tex., College Station.—Alumni Memorial Young Men's Christian Association of Agricultural and Mechanical College has tentative plans by F. E. Giesecke, College Station, for association building; three stories and basement; shape of cross; classic style; gymnasium in basement; roof garden; front portion 42x112 feet; perpendicular portion will contain auditorium 50x72 feet.

Va., Danville.—Danville Lodge, No. 227, Benevolent and Protective Order of Elks, contemplates erection of lodge building.

BANK AND OFFICE

Fla., Jacksonville.—Cohen Bros. will have plans revised by H. J. Klutho, Jacksonville, for store and office building. (See "Stores.")

S. C., Columbia.—James B. Urquhart, National Loan & Exchange Bldg., Columbia, is preparing plans for structure to be known as Manson Bldg.; three stories; marble, terra cotta and brick work; tile floor; plate-glass; gas and electric lighting; will probably ask for bids about March 1.

S. C., Greenville.—William A. Wallace will erect office and store building on West Washington St.; four stories; pressed brick; front to have plate-glass windows and white limestone trimmings; first floor for stores; upper floors for offices; steam heat.

S. C., Olanta.—Farmers' Bank of Olanta will erect bank building. (See "Machinery Wanted.")

Tenn., Knoxville.—B. H. Sprankle will erect office and apartment building. (See "Apartment Houses.")

Tex., Victoria.—Levi Bank & Trust Co. has plans by Hull & Preager of Victoria for remodeling interior of bank building; cost, $3000.

Tex., Malone.—First State Bank, S. Q. Pierce, president, contemplates erecting brick bank building.

Tex., Waco.—I. A. Goldstein purchased site 50x165 feet on which to erect steel office building to cost $150,000.

Va., Richmond.—L. Z. Morris has plans by Carneal & Johnston, Richmond, for office and warerooms; two stories; 43x140 feet; mill construction; cost, $17,000; construction begun. (Recently noted under "Stores.")

CHURCHES

Ala., Birmingham.—Hunter Street Baptist Church Association contemplates erecting $100,000 edifice. Address The Pastor, Hunter Street Baptist Church Association.

Ala., Birmingham.—South Highlands Presbyterian congregation contemplates purchasing 50-foot site adjoining church building for $12,000 on which to erect addition to Sunday-school building. Address The Pastor, South Highlands Presbyterian Church.

Ala., Birmingham.—Sixty-sixth Street Baptist Church, Rev. W. N. Swain, pastor, will let contract about April or May for erection of edifice; main floor 70x80 feet; basement will contain nine classrooms; brownstone or brick; furnace heat; electric lighting; cost, $10,000; plans by J. D. Mattox, Birmingham. (Recently noted.)

Ala., Ensley.—Methodist congregation has arranged for funds to complete $50,000 edifice in course of construction at Avenue G and 20th St. Address The Pastor, Ensley Methodist Church.

Ala., Hobson City (not a postoffice).—New Hope Baptist Church, Rev. S. B. Brownlee, pastor, has plans by W. A. Rayfield & Co., Mason Bldg., Birmingham, Ala., for edifice; 30x40 feet; ordinary construction; furnace heat; electric lighting; cost, $3000.

Ala., Talladega.—Congregation Emanuel will erect synagogue. Address The Rabbi, Congregation Emanuel.

Ark., Helena.—First Methodist congregation will erect $40,000 edifice. Address The Pastor, First Methodist Church.

Ark., Postelle.—African Methodist Episcopal Church, Rev. O. D. Smith, pastor, has plans by W. A. Rayfield & Co., Mason Bldg., Birmingham, Ala., for edifice; 30x40 feet; ordinary construction; cost, $2000.

D. C., Anacostia.—Anacostia Baptist Church, Rev. Frank L. Bardens, pastor, Jefferson and Fillmore Sts., will erect addition to edifice; 111x112 feet; frame.

D. C., Washington.—Gospel Mission, H. W. Kline, supperintendent, 1230 Pennsylvania Ave. N. W., will erect mission building on north side of Pennsylvania Ave. near present structure.

Fla., Wewahitchka.—African Methodist Episcopal Church, Rev. J. R. Callahan, pas-

tor, has plans by W. A. Rayfield & Co., Mason Bldg., Birmingham, Ala., for edifice; 50x40 feet; ordinary construction; cost, $2000.

Ga., Calverton.—Methodist Church will erect $6000 edifice. Address Building Committee. (See "Machinery Wanted.")

Ky., Winchester.—Central Baptist congregation will erect $30,000 edifice; 60x75 feet; brick; will open bids April 1. Rev. George W. Shepherd is pastor.

Md., Baltimore.—St. Mary's Industrial School, Wilkens and Caton Aves., is having plans prepared by Robert C. Ullrich, Gunther Bldg., Baltimore, for altar to be built in chapel; marble, tile and ornamental plaster construction; estimated cost, $14,000.

Md., Baltimore.—West Forest Park Baptist Mission purchased site at Liberty Heights and Montgomery Aves., Forest Park, and will soon consider plans for edifice; Rev. Dr. Charles H. Dodd (pastor Eutaw Place Baptist Church), The Cecil, is in charge.

Mo., Fulton.—Bids will be received for erection of church building until 2 P. M. February 20; plans and specifications on file with architects, Flanders & Flanders, at Dallas, Tex.; W. McMillan & Son, Chicago, Ill.; Builders' Exchange, St. Louis, Mo.; Spring River Stone Co., Carthage, Mo., and office of J. H. Atkinson, secretary, Fulton; plans and specifications may be had by general contractors from Mr. Atkinson upon deposit of certified check for $25.

Mo., Kansas City.—Benton Boulevard Presbyterian Church, Rev. J. Newton McGinley, pastor, has begun erection of proposed edifice; two stories; semi-fireproof; 46x80 feet; vitrified brick with Carthage white-stone trimmings; main auditorium to have seating capacity of 300; plans by S. B. Tarbet & Co. of Kansas City.

N. C., Lenoir.—Methodist congregation, Rev. C. M. Pickens, pastor, has not selected architect to prepare plans for edifice; cost $20,000. (Recently noted.)

Tenn., Chattanooga.—Centenary Methodist Episcopal Church South, John S. Martin, chairman of committee, is having plans prepared by Adams & Alsup, James Bldg., Chattanooga, for edifice.

Tenn., Chattanooga.—Northside Presbyterian congregation purchased site with frontage of 140 feet and will erect brick edifice. Address The Pastor, Northside Presbyterian Church.

Tenn., Lewisburg.—Roberson Fork Christian congregation will erect frame edifice. Address The Pastor, Roberson Fork Christian Church.

Tex., Bryan.—St. Andrew's congregation will erect edifice. Address The Pastor, St. Andrew's Church.

Tex., Luling.—Baptist congregation will erect building to contain recitation and reading rooms for Baraca and Philathea classes. Address The Pastor, Baptist Church.

Tex., Galveston.—Baptist Church will erect brick or concrete edifice. Address Rev. R. D. Wilson, 1515 Avenue I.

Tex., Gonzales.—Mt. Pilgrim Baptist Church, Rev. F. O. Brown, pastor, has plans by W. A. Rayfield & Co., Mason Bldg., Birmingham, Ala., for edifice; 30x40 feet; ordinary construction; cost, $3000.

Tex., Madisonville.—First Baptist congregation will erect edifice. Address The Pastor, First Baptist Church.

Va., Harrisonburg.—Methodist Episcopal Church South will erect edifice; Gothic architecture; one 90-foot tower and two secondary towers; will be of brown sandstone, granite with Indiana limestone trimmings or native limestone; cost about $35,000; furnishings, exclusive of organ, will cost $10,000 additional; C. M. Robinson, Richmond, Va., is architect.

Va., Richmond.—Westhampton Baptist congregation is considering erection of edifice. Address The Pastor, Westhampton Baptist Church.

Va., Richmond.—Westhampton Episcopal congregation is arranging for erection of proposed edifice; contemplates beginning construction work March 1. Address The Pastor, Episcopal Church of Westhampton.

CITY AND COUNTY

Ky., Louisville—Hospital.—Hospital Commission, John Chambers, engineer, 312 Columbia Bldg., has not selected architect to prepare plans for hospital; fireproof construction; cost, $800,000.

Ky., Whitesburg—Jail.—Perry County Commissioners will erect $12,000 jail and $25,000 courthouse.

Miss., Meridian—Fire Stations.—City awarded contracts at $2746 each to C. H. Dabbs, Meridian, for erection of three fire stations, as follows: 5th St. and Thirty-ninth Ave.; 16th St. between Eleventh and Twelfth Aves.; 16th St. and Twenty-second Ave. (Recently noted.)

Okla., Mangum—City Hall and Fire Station.—Bids received until 7 P. M. February 14 (change of date) for erection of city hall and fire station; two stories and basement; certified check for 3 per cent. amount of bid, payable to Chas. M. Thacker, Mayor; separate bid for steam heating and plumbing; certified check for 5 per cent. amount of these; plans and specifications at office of City Clerk or of Glenn Bros., architects, Quanah and Wichita Falls, Tex.

Okla., Red Rock—Jail.—City voted bonds to erect jail. Address The Mayor.

Okla., Tulsa—City Hall.—City plans voting on $100,000 bond issue to erect city hall. Address The Mayor.

S. C., Spartanburg—Fire Station, City Hall. City plans issuance of bonds for fire department and city hall; $9000 for former and $40,000 for latter. Address The Mayor.

Tex., Corsicana—Jail.—Navarro county is having plans prepared by W. G. Clarkson, Corsicana, for remodeling and repairing county jail; cost, $6000.

Va., Richmond—Market.—Finance committee recommended appropriation for erection of First Market; cost $30,000 to $35,000; also proposes installation of cold-storage plant in Second Market to cost $10,000. Address The Mayor.

Va., Roanoke—City Hall.—City plans erection of city hall; will vote on bond issue to purchase site at cost of $150,000; F. L. Gibbonney, City Engineer.

COURTHOUSES

Ga., Atlanta.—Building Committee, H. E. W. Plamer, chairman, recommended that Fulton county have plans prepared by T. Ten Eyck Brown and Thomas Morgan, Atlanta, Ga., for courthouse to cost about $500,000. (Recently noted.)

Ky., Whitesburg.—Perry County will erect $25,000 courthouse and $12,000 jail. Address County Commissioners.

S. C., Dillon.—W. A. Edwards, Candler Bldg., Atlanta, Ga., has commission to prepare plans for courthouse and jail.

Tex., Andrews.—Andrews county will open bids March 1 for erection of courthouse; two stories; 41x41 feet; ordinary construction; cost $6000; plans by W. H. Kelly, Pecos, Tex. Address proposals to N. P. Ross. (Andrews county recently noted to have voted $8000 bond issue.)

DWELLINGS

Ala., Birmingham.—Emma Waldhart will erect two-story frame dwelling; cost $2400.

Ala., Birmingham.—Sixty-sixth Street Baptist Church, Rev. W. N. Swain, pastor, 66th St. and Walker Ave., will erect two-story parsonage; nine rooms; furnace heat; electric lighting; cost, $3000.

Ala., Montgomery.—R. L. Hill will erect residence; cost, $20,000.

Ala., Troy.—Thornton Wood has plans by Frank Lockwood, Montgomery, Ala., for two-story residence.

D. C., Washington.—Charles W. King, Jr., 1519 Monroe St. N. W., will erect six dwellings at 13th and Fairmont Sts., Columbia Heights.

D. C., Washington.—Harry Wardman, 1342 New York Ave. N. W., has plans by Albert Beers, 1342 New York Ave. N. W., Washington, for 18 six-room dwellings at Perry and 14th Sts.

D. C., Washington.—W. E. Pickford, 1817 47th St. N. W., has plans by W. J. Simmons, 1719 New Jersey Ave. N. W., Washington, for two-story brick storage and dwelling at 1615 O St. N. W.; cost, $4000; construction by owner.

D. C., Washington.—Charles Boyd, 1215 E St. N. E., has plans by L. T. Williams for three two-story brick dwellings at 1238 to 1243 E St. N. E.; 20x33 feet; ordinary construction; hot-water heat; cost, $2500 each; plans by L. T. Williams, 1389 F St. N. E., Washington; construction by owner.

D. C., Washington.—R. I. Carr has plans by L. T. Williams, 1389 F St. N. E., Washington, for two dwellings on Georgia Ave. N. W.; 24x34 feet; ordinary construction; hot-water heat; cost of lighting, $75; cost of dwellings, $3000 each; construction by owner.

Fla., Jacksonville.—H. D. DeGrove will erect residence.

Ga., Atlanta.—A. H. Cooledge will erect eight four-room dwellings; cost, $6440; day labor.

Ga., Atlanta.—J. T. Taylor will erect residence; cost, $4250.

Ga., Atlanta.—C. Drayer will erect residence; cost, $2500.

Ga., Atlanta.—N. C. McPherson will erect dwelling recently noted; nine rooms; mill construction; gas and electric lighting; cost within $5000; plans and construction by owner.

Ga., Culverton.—John O. Moore will erect $10,000 dwelling; construction begun; invites bids on heating, gas and electric lighting, pneumatic cleaning, plumbing, painting, etc. (See "Machinery Wanted.")

Ga., Savannah.—Geo. F. Armstrong will erect residence; cost, $100,000.

Ga., Rome.—J. M. Sanders will erect residence.

La., New Orleans.—R. E. E. de Montluzin has plans by Baccich & de Montluzin, 216 Barronne St., New Orleans, for dwelling recently noted; ordinary construction; hot-water heat; cost, $6000. (See "Machinery Wanted.")

La., New Orleans.—F. W. Lambert has plans by Wroney & Boettner, 1634 Tulane Ave., New Orleans, for additions and alteration to dwelling and store; 30 feet 5½ inches by 115 feet 4½ inches; ordinary construction; frame; cost, $3500; bids opened. (Recently noted.)

La., New Orleans.—Walter Hernandez will erect one-story bungalow; cost, $4500.

Md., Baltimore.—Frank Novak, 2808 Jefferson St., has plans by Joseph F. Hirt, 2808 Jefferson St., Baltimore, for 10 dwellings in 2700 block of Monument St.; two stories; brick; 13x42 feet; cost $10,000.

Md., Baltimore.—Rockdale Realty Co. has plans by Jacob F. Gerwig, 210 E. Lexington St., Baltimore, for seven dwellings 13x44 feet on Wilhelm Ave. and six 12x47 feet on Payson and Wilhelm Sts.; two stories; tin roofs; hot-air heat; cost $13,000.

Md., Baltimore.—Charles Morton, Windsor Ave., near 8th St., is having plans prepared by F. E. Beall, 213 St. Paul St., Baltimore, for 14 dwellings on Windsor Ave. between 7th and 8th Sts.; brick; two stories; 15x69 feet; slag roof; steam heat; cost $28,000.

Md., Baltimore.—Lemuel Appold, 904 N. Charles St., has plans by Ellicott and Emmart, Union Trust Bldg., Baltimore, for residence on Charles-St. Blvd. and 34th St.; two stories; brick; steam and hot-water heat; gas and electric lights; plumbing.

Md., Baltimore.—Edward Gorman, 203 Augusta Ave., will erect number of dwellings at Euclid Ave. and Woodlawn Rd.

Md., Baltimore.—Henry Williams, 605 Union Trust Bldg., will receive bids until February 3 for erection of residence on Charles-St. Blvd.; three stories; brick; cost, about $30,000; plans by E. L. Palmer, 408 Roland Ave., Roland Park, Md.; contractors estimating are J. Henry Miller, 208 Dover St.; Gladfelter & Chambers, 2072 Woodberry Ave.; G. Walter Tovell, Eutaw and Dolphin Sts., all of Baltimore; Roland Park Company, 408 Roland Ave., Roland Park, Md. (Recently noted.)

Md., Baltimore.—Howard V. Harvey, North and Baltimore Sts., will award contract for erection of residence on Park Heights Ave.; two and a half stories; 40x45 feet; hardwood interior finish.

Md., Baltimore.—Hugo Walther, Park Heights Ave. and Pimlico Rd., is having plans prepared by Jacob F. Gerwig, 210 E. Lexington St., Baltimore, for three dwellings on Park Heights Ave.; brick; three stories; 23x40 feet; owner will receive bids.

Md., Baltimore.—Provident Realty Corporation, Garrison and Piedmont Aves., has plans by Henry J. Tinley, 314 N. Charles St., Baltimore, for dwelling on Elsinore Ave., near Alto Ave.; 38x45 feet; one and one-half stories; frame; slate roof; steam heat; cost, $3000.

Md., Baltimore.—Wm. Saxon, 419 Equitable Bldg., is receiving estimates for erection of 20 dwellings on Pimlico Rd., near Virginia Ave.; two stories; brick; steam heat; gas and electric lighting; cost, $30,000; plans by F. E. Beall, 213 St. Paul St., Baltimore; Wm. T. Childs, 16 W. 20th St.,; L. A. Young and Park Heights Contracting Co. are estimating.

Md., Boone (not a postoffice).—Arthur Boehm, 807 Union Trust Bldg., Baltimore, Md., has plans by Geo. R. Morris, Gunther Bldg., Baltimore, Md., for two cottages along Severn River; reported to be two and a half stories; broad verandas; hot-water heat; electric lights.

Md., Naumana (not a postoffice).—Ferry Farms Realty Co., H. W. Rusk, agent, 618 Law Bldg., Baltimore, Md., is having plans prepared by Emory & Nussear, 415 Professional Bldg., Baltimore, Md., for two dwellings; two and a half stories; cost, $16,000; Henry Smith & Sons, 116 S. Regester St., Baltimore, Md., are estimating on construction.

Miss., Vicksburg.—Richard Hackett will erect residence.

Miss., Vicksburg.—John Salter will erect dwelling.

Tenn., Bristol.—Joseph Lockett is having plans prepared for residence.

Tenn., Franklin.—Presbyterian congregation will erect manse to cost several thousand dollars. Address The Pastor, Presbyterian Church.

Miss., Hattiesburg.—J. J. Bethea is having plans prepared for cement-block residence; cost $10,000.

S. C., Spartanburg.—A. O. Simpson, president of Farmers' Fertilizer Co., will erect residence.

Tenn., Hill City.—Mrs. Percy Marshall has plans by Huntington & Sears, James Bldg., Chattanooga, for dwelling; two stories; frame and stucco; brick foundation; gas and electric lighting; hot-water heat; hard pine interior finish.

Tenn., Isabella.—C. W. Renwick is having plans prepared by Baumann Bros., Knoxville, for $10,000 residence.

Tenn., Knoxville.—J. H. Anderson has plans by R. F. Graf & Sons, Knoxville, for residence; Georgia Imperial style; marble or impervious brick; two stories; seven rooms; vacuum cleaning and sweeping system; sun parlor and breakfast room enclosed in glass; hardwood floors, except in bathroom, which will be rookwood tiling; walls frescoed on canvas; mahogany woodwork throughout; closet and bathroom doors to have bevel finish plate mirrors; green tile roof; stone foundation.

Tenn., Knoxville.—Earl Sterchi is having plans prepared for bungalow.

Tenn., Knoxville.—S. H. Keener is having plans prepared by A. B. Baumann, Knoxville, for 10-room residence.

Tex., Dallas.—C. A. Langford has plans by Associated Architects, 257 Main St., Dallas, Tex., for dwelling; eight rooms; cost $2500.

Tex., Dallas.—C. A. Moser has plans by Associated Architects, 257 Main St., Dallas, for two-story dwelling; eight rooms; frame; brick foundation; gas and electric lighting; plate-glass mirror doors; cost $4500; owner furnishes all material.

Tex., Dallas.—J. P. Hatfield has plans by Associated Architects, 257 Main St., Dallas, for eight-room dwelling; concrete basement; frame; plastered throughout; electric lighting; cost $4500.

Tex., Goliad.—L. N. Baker will erect colonial-style dwelling.

Va., Bristol.—W. E. Lockett is having plans prepared for residence.

Tex., Houston.—L. P. Tisinger will erect store and dwelling.

Tex., Houston.—H. E. Stewart will erect residence in Magnolia Park.

Tex., Lelia Lake.—I. L. Stanword has plans by Associated Architects, 257 Main St., Dallas, Tex., for six-room cottage; cost $2000.

Tex., Richmond.—D. R. Pearson has not selected architect to prepare plans for 40x50-foot dwelling; ordinary construction; electric and acetylene lighting; cost $6000. (See "Machinery Wanted.")

Va., Richmond.—Mrs. L. P. Cottrell will erect two-story brick dwelling.

Va., Richmond.—Mrs. M. E. Cottrell will erect two-story brick dwelling; cost $8700.

Va., Richmond.—W. B. West will erect two-story brick dwelling; cost $3200.

Va., Richmond.—W. B. West and W. T. Lindsay will erect 2 detached two-story frame dwellings on Wallace St. to cost $2200 and 6 on Meadow St. to cost $6600.

Va., Richmond.—N. D. Wilkinson will erect store and dwelling; brick construction; cost, $8000.

Va., Richmond.—T. B. Pearson will erect residence; two stories; brick; cost $5850.

Va., Richmond.—J. R. Cole will erect two-story brick dwelling; cost $3000.

Va., Roanoke.—J. K. Richardson will erect $5000 residence.

Va., Roanoke.—Wright & Trout will erect residence; cost $4500.

W. Va., Edgewood, P. O. Wheeling.—Harry L. Bond will erect residence to replace structure recently reported burned.

W. Va., Parkersburg.—E. L. McGhee will erect residence.

W. Va., Parkersburg.—Miss Margaret Bacher will erect residence.

GOVERNMENT AND STATE

Ga., Milledgeville—Prison.—Prison Commission accepted plans by A. C. Bruce of

Atlanta, Ga., for prison at State farm; ferro-concrete, reinforced; 137x56 feet; fireproof; dormitory 210x62 feet; dining-room will be 42x200 feet and will seat 200 prisoners; lodging hall 42x200 feet, and will accommodate 250 prisoners; construction to begin in early part of February. Commission has not decided whether building will be erected by contract work or by convict labor under supervision of superintendent. (Previously mentioned.)

Ky., Ashland—Postoffice.—Government has not awarded contract to J. G. Hughes of Ashland for erection of postoffice. (Recent report an error.)

Miss., Brookhaven — Postoffice. — Treasury Department, Office of Supervising Architect, James Knox Taylor, Washington, D. C. Sealed proposals will be received until 3 P. M. March 8 and then opened for construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of United States Postoffice at Brookhaven, Miss., in accordance with drawings and specification, copies of which may be obtained from custodian of site at Brookhaven, or at this office, at discretion of Supervising Architect.

N. C., Raleigh—Administration Building.—Joint Senate and House Committee on Public Buildings and Grounds endorsed bill providing for $1,000,000 State bond issue, and authorizing William W. Kitchin, Governor, to appoint commission to erect State administration building; structure is to be of fireproof construction and contain 40 committee-rooms; cost about $900,000.

HOTELS

Ala., Foley.—Magnolia Hotel Co. will erect 12-room addition.

Fla., St. Petersburg.—W. H. Adams will repair Manhattan Hotel recently reported damaged by fire; loss $5000 to $6000.

Ga., Union City.—Greater Georgia Development Co. organized by St. Elmo Massengale of Atlanta, Ga., and others; will erect hotel. (See "Land Developments.")

Ky., Paintsville.—Nash, Herr & Rice purchased Hager Hotel property, and will, it is reported, erect hotel.

La., Lake Charles.—W. H. Worsham and J. G. Michle plan erection of 50-room addition to Majestic Hotel.

La., Mandeville. — Wahrer-Doughtie Hotel Co. will open bids February 28 for erection of hotel annex; 225x40 feet; ordinary construction; Van Auken system of steam heat; electric lighting; electric elevator; plans by W. A. Stanton, Miss. (Recently noted.)

N. C., Waynesville.—Southern Assembly, Dr. James Cannon, general superintendent, Blackstone, Va., will erect one large and two small hotels. (See "Land Developments.")

Okla., Carnegie.—Kiowa Mineral Co. incorporated with $8000 capital stock; Frank Bailey, president, Chickasha, Okla.; Dan Peery, vice-president, Carnegie; S. H. Roberts, secretary; B. F. Holding, treasurer, both of Anadarko, Okla.; will utilize waters of sulphur springs, erect hotel and bathhouse, etc.

Tenn., South Pittsburg.—Company is being organized to erect $12,000 to $15,000 hotel; plans not definite; R. M. Payne recently noted interested.

Tex., Corpus Christi.—H. G. Sherman and J. O. Moore are promoting erection of hotel; 100x100 feet; plan also to erect pleasure pier, dancing pavilion and boathouses; cost $300,000.

Tex., Houston.—E. L. Dennis will erect five-story hotel; 100x125 feet; fireproof construction.

Tex., Sinton.—Sinton Townsite Co. plans erection of hotel; appointed Jos. E. Green to advertise for bids.

Tex., Waco.—W. W. Seley has plans by Roy E. Lane, Waco, for annex to and remodeling of Statehouse; six to eight stories; 50x165 feet; front of stone and terra-cotta, with skeleton steel construction; colonnade balcony 120x10 feet on every floor; about 250 rooms; roof garden between annex and Statehouse proper; ground floor, stores.

Tex., Wichita Falls.—St. James Hotel will expend $15,000 to remodel hotel.

Va., Berkley, Sta. Norfolk.—Dr. Lawford will enlarge Lawford Hospital and Hotel.

W. Va., Clarksburg.—Vergil L. Highland, president of Empire National Bank, will erect business block on site of Traders' Hotel recently reported burned; will probably contain hotel, stores and offices.

MISCELLANEOUS

Fla., Okahumpka—Sanitarium.—Dr. J. M. Masters, Newport, Tenn., will have plans prepared by Knoxville (Tenn.) architects for $15,000 sanitarium; steam heat; five windows to each room.

Fla., St. Petersburg—Casino.—William S. Davis, representing Edward Shipire, Toledo, O., is considering, it is reported, erection of casino.

Ky., Okolona, Station Louisville.—Town Hall.—H. D. Robb, John Lips, Edward Miller and others are interested in erection of town hall; lower floor for store; upper floor for hall.

Md., Baltimore — Asylum. — St. Vincent's Male Orphan Asylum, York Rd. and Five-Mile La., will erect wing to main building, which will provide additional classroom and hospital ward; cost about $10,000; will also erect greenhouse; Adam Deupert, Clerk Court of Common Pleas, 12-18 Courthouse, is president.

Md., Roland Park — Hospital. — Children's Hospital School, Dr. William S. Baer, 4 E. Madison St., will have plans prepared by Otto G. Simonson, American Bldg., Baltimore, for hospital building; two stories; brick; cost about $30,000. (Recently mentioned.)

Miss., Biloxi—Buildings.—Trustees Seashore Camp Grounds decided to issue $20,000 of bonds for erecting $6000 tabernacle and making other improvements; will also erect college building and remodel Keller Lodge, Wesley Hall and Epworth League Bldg. as dormitories, etc. L. N. Dantzler, Dr. W. T. Bolton and others comprise building committee.

Miss., Gulfport — Clubhouse. — Mississippi Coast Country Club will erect clubhouse and pier; will provide for $12,500 of bonds.

Miss., Meridian — Sanitarium. — Meridian Sanitarium Co. has organized with Dr. M. J. Lowry president, Dr. J. R. Tackett vice-president, Dr. J. H. Rush treasurer and Dr. E. G. Denson secretary; accepted plans for sanitarium; three stories and basement, with accommodations for 50 patients; kitchen, laundry and steam-heating plant will be installed in basement; cost $20,000.

Mo., Arcadia—Clubhouse.—Arcadia Country Club, John H. Curran, president, has plans by Eames & Young, St. Louis, Mo., for clubhouse; fireproof; two stories; 400 rooms; offices in Third National Bank Bldg., St. Louis, Mo. (See "Land Developments.")

N. C., Asheville — Clubhouse. — Asheville Chapter, American Woman's League, is having plans prepared for $10,000 club or chapter house.

N. C., Charlotte — Orphanage. — Building committee of Thompson Orphanage accepted plans by Louis Asbury of Charlotte for general remodeling of orphanage; plan is to rebuild present plant gradually, requiring when completed 12 new buildings; first cottage, or dormitory, will be 50x50 feet; ordinary construction; central heating plant; cost $8500; will probably open bids May 1; also main or administration building, infirmary and industrial building; total cost about $100,000; all present buildings will be removed with exception of chapel; W. J. Smith is superintendent.

N. C., Waynesville — Auditorium, etc. — Southern Assembly, Dr. James Cannon, general superintendent, Blackstone, Va., will erect auditorium and lecture hall; in connection with development of 1000 acres of land for summer assemblies. (See "Land Developments.")

N. C., Wilmington—Pavilion.—John W. Harper awarded contract to W. B. Bevil' (not W. B. Devill, as recently erroneously reported), 507 Dock St., Wilmington, for erection of pavilion at Carolina Beach; 150x50 feet, with annex 30x40 feet; plans by H. E. Bonitz, Wilmington.

Okla., Carnegie—Bathhouse.—Kiowa Mineral Co. incorporated with Frank Bailey of Chickasha, Okla., president; will erect bathhouse and hotel. (See "Hotels.")

Tex., Corpus Christi — Dancing Pavilion, etc.—H. G. Sherman, J. O. Moore and others are interested in erection of dancing pavilion, pleasure pier and bath and boat houses. (See "Hotels.")

Tex., Waxahachie — Orphanage. — Baptist Orphanage is having plans prepared for proposed orphanage building; two stories; brick; 46 rooms; cost $15,000.

Va., Berkley, Station Norfolk—Hospital.—Lawford Hospital, Hardy Ave. and Main St., invites bids for erection of 25-foot addition, two stories, of brick; cost about $2000.

W. Va., Northfork—Restaurant.—L. G. Torney & Co. will open bids February 15 for rebuilding restaurant recently reported burned; two stories; fireproof construction; brick; electric lighting; cost $4000; plans by Pedigo & Gary, Bluefield.

RAILWAY STATIONS

Ark., Rogers.—St. Louis & San Francisco Railroad, F. G. Jonah, chief engineer construction, St. Louis, Mo., will, it is reported, erect $25,000 passenger station.

Fla., Dade City.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., will, it is reported, erect depot; frame; tile roof.

W. Va., Charleston.—Kanawha & West Virginia Railroad Co., G. S. Plumley, engineer, Charleston, will erect 100x26-foot freight and passenger station; ordinary construction; frame; cost, $3000. (Recently noted.)

SCHOOLS

Ark., Hazen.—City will erect $10,000 brick school to replace structure reported burned Address The Mayor.

Ga., Gainesville.—Bond Commission, R. D. Mitchell, chairman, and James H. White, secretary, will receive bids until February 15 for erection of school building; plans and specifications at office of City Clerk.

La., Hammond.—City will soon vote on $100,000 bond issue for school and sewerage improvements. Address The Mayor.

La., Independence. — Independence School District voted special tax to erect $20,000 school. Address District School Trustees.

La., Marthaville. — High School District plans voting on special tax to erect brick school. Address District School Trustees.

Md., Baltimore.—Board of Awards will open bids in about three weeks for erection of building for Polytechnic Institute on North Ave.; capacity for about 1200 students; cost about $350,000; plans by Baldwin & Pennington, Professional Bldg., Baltimore. (Previously noted.)

Md., Frederick.—School Board plans to receive competitive plans between February 4 and March 11 for proposed boys' high-school building; two stories and basement; plans awarding contract for construction about May 15.

Md., Lutherville.—Charles W. Gallagher, owner of Maryland College for Women, will rebuild administration building reported burned; loss $125,000.

N. C., Asheville.—School Board, R. J. Tighe, secretary, has plans by Smith & Carrier, Asheville, for erection of additions to five schools; mill construction; steam heat; cost $50,000; date of opening bids not set. (Plans for issuance of $50,000 of bonds recently noted.)

N. C., Charlotte.—Biddle University opened bids for erection of Carnegie Library; Goode Construction Co. of Charlotte is lowest bidder; plans by Hunter & Gordon, Charlotte, call for pressed-brick structure; terra-cotta trimmings; cost $12,000 to $15,000. (Recently noted.)

Okla., Medford.—Charles N. Ernest, clerk school district, advises that contract has not been let nor time set for receiving bids for erection of 70x130-foot school building previously noted; cost $33,000.

S. C., Varnville.—City contemplates erection of $10,000 school. Address The Mayor.

Tenn., Clarksville.—Grand Lodge of Tennessee, Independent Order of Odd Fellows, invites architect to submit plans and specifications for dormitory, chapel and school building; brick; steam heat; electric lighting; cost $20,000. Address Dancey Fort. (Previously noted under "Association and Fraternal Buildings" at New Providence, Tenn.)

Tenn., Pulaski.—Board of trustees of Martin College will erect building to contain dormitory and classrooms; cost $20,000; other facts not available. (Recently noted under Nashville, Tenn.)

Tex., Brookshire.—School Board will receive bids until 10 o'clock P. M. February 3 for erection of two-story brick school; certified check for $250, payable to J. W. Edmanson, president of School Board; plans and specifications at office of F. S. Glover & Son, architect, 324 Mason Bldg., Houston, Tex., and of V. M. Donigan, Brookshire.

Tex., Dallas.—C. M. Moore, secretary of School Board, will receive bids for erection of six-room addition of Fair Park school; fireproof or ordinary brick construction; wooden floors.

Tex., Petty.—Petty School District trustees plan issuance of bonds to erect $10,000 school.

Tex., Silverton.—Silverton Common School District voted $25,000 bond issue to erect school. Address District School Trustees.

Tex., Waxahachie.—Trinity University, H. L. Williamson, secretary, has not selected architect for girls' dormitory building mentioned in November; cost $50,000; steam heating plant, cost $5000; electric lighting; cement sidewalk; bids to be opened in June.

Tex., Winfield.—Winfield school district will vote February 20 on $8000 bond issue to erect school to replace structure recently reported burned. Address District School Trustees.

Va., Marion.—Marion College trustees are arranging to rebuild college.

Va., Stuart.—City is having plans prepared by G. R. Ragan, Salem, Va., for proposed $10,000 school.

W. Va., Rowlesburg.—Board of Education is having plans prepared for eight-room school; English-Gothic style; cost $20,000.

STORES

Ala., Birmingham.—M. A. Hines & Co. will erect three two-story frame buildings; cost $6750.

Ark., Little Rock.—Henry Leigh & Co. will erect business building; one story and basement; fireproof; 50x140 feet; cost $20,000.

Ark., Stuttgart.—Southern Grocery Co., Hammett Grocery Co. and Gallespie Bros., all of Pine Bluff, Ark., will erect $10,000 building and establish distributing house.

D. C., Washington.—S. Oppenheimer, 514 9th St. N. W., has plans by A. S. J. Atkinson, 1101 G St. N. W., for store at 809 E St. N. W.; two stories; brick; 50 feet by 97 feet by 34 feet 6 inches; ordinary and mill construction; stucco and plate glass; galvanized iron and colored tile; steam heating; electric lighting; cost $10,000; construction by owner.

Fla., Jacksonville.—Cohen Bros. will have plans revised by H. J. Klutho, Jacksonville, for store and office building; 208x300 feet; four stories; first two floors for store and upper floors for offices; three entrances to store with vestibules 20x25 feet; 20-foot ceilings in store; octagon-shape dome framed with steel for skylight 72 feet from edge to edge and costing $15,000; three marble staircases; light court 158x162 feet; corridors, toilet-rooms, etc., have tiled floors and wainscoting; lower story terra-cotta; upper stories pressed brick and ornamental terra-cotta; four passenger and two freight elevators; 125,000 square feet floor space; construction by owner under supervision of architect. (Previously noted.)

Ga., Atlanta.—Askew & Wilson will erect business building; three stories; brick; cost, $25,000.

Ga., Doerun.—A. Huber will erect five store buildings; brick; construction begun.

Ga., Doerun.—J. R. Bass will erect two-story brick store building; construction begun.

Md., Baltimore.—Sam Zito has plans by Silvio Tosi, 410 N. Gilmor St., Baltimore, for store and apartment-house. (See "Apartment-houses.")

Miss., Jackson.—Atwood & McKissack will open bids February 10 for erection of store building; 43x45 feet; ordinary construction; hot-air heat; cost $10,000; plans by W. A. Kayfield & Co., Mason Bldg., Birmingham, Ala. (Recently noted at Jackson, Ala.)

Md., Hagerstown.—J. W. Myers will erect business building.

Miss., Sumrall.—E. C. Kinsbery will rebuild store building recently reported burned; one story; 40x60 feet; brick and concrete; electric lighting; architect not selected.

Mo., St. Louis.—Thomas J. O'Reilly estate will erect nine-story store building; cost $144,000.

N. C., Sanford.—Insurance Realty & Investment Co. is planning to rebuild business block recently reported burned.

N. C., Sanford.—W. T. Buchanan will rebuild structures recently noted burned; construction will not begin for several months.

S. C., Batesburg.—L. M. Mitchell will erect 39x161-foot store and office building; plans by Shand & Lafaye, Columbia, S. C.; date of opening bids not set. (Recently noted.)

S. C., Columbia.—Estate of C. H. Mason, C. B. Simmons, executor, has plans by James B. Urquhart, Columbia, for business building; three stories; ornamental front; cost $40,000.

Tenn., Memphis.—Julius Goodman, Union Ave. and Main St., purchased building at 64 S. Main St. and will remodel for store.

Tex., Bastrop.—Pearcy & Booth have not selected architect to prepare plans for store building; 25x110 feet; brick; electric lighting; cost $3000. (Recently noted.)

Tex., Dallas.—Dan Sonnenthiel will erect business building on Commerce St. near St. Paul St.

Tex., El Paso.—Mr. Martinez and associates plan erection of store building to be known as Plaza Block; six stories and basement; concrete and steel; cost $150,000.

Tex., Gainesville.—S. H. Kress & Co., 396 Broadway, New York, will erect $25,000 store building.

Tex., Houston.—L. P. Tisinger will erect store and dwelling.

Tex., Mercedes.—David Chapa will erect one-story brick business building; 50x100 feet; cost about $5000.

Va., Chatham.—G. E. Thompson will open bids about February 25 for rebuilding store building recently reported burned; two stories; 54x54 feet; brick; cost $4500.

Va., Newport News.—L. P. Stearns will erect business building; three stories and basement; 25x100 feet.

Va., Newport News.—John Austrian will erect two-story brick and steel fireproof business building; main structure will be 25x50 feet; cost $5000; plans by C. T. Holtzclaw, Hampton, Va. (See "Machinery Wanted.")

Va., Richmond.—L. Baldacci and L. Marchetti will erect three-story brick store; cost $9000.

Va., Richmond.—Mary E. Miller will erect detached two-story brick store; cost $4000.

Va., Wytheville. — Humphreys-Davidson Hardware Co. will erect brick business building; two stories; 50x87 feet; two fronts.

W. Va., Mattewan.—J. H. Phillips will rebuild store building recently reported burned; concrete construction.

W. Va., Mattewan.—George R. Buskirk will rebuild store building recently reported burned; 26x50 feet; furnace heat; cost $2000.

W. Va., Mattewan.—R. W. Buskirk will rebuild store building recently reported burned; concrete construction; furnace heat.

W. Va., Parkersburg.—W. W. Jackson will erect store and apartment building. (See "Apartment-houses.")

THEATERS

Md., Baltimore. — Empire Theater Co., through Otto G. Simonson, associate architect, American Bldg., Baltimore, will receive bids until February 9 for erection of theater at 311-17 W. Fayette St.; contractors estimating are J. Henry Smith & Sons, 116 S. Regester St.; Peters & Harding, 15 E. Fayette St.; Noel Construction Co., German and Calvert Sts.; Henry S. Ripple, 7 Clay St.; J. J. Walsh & Son, 1533 Maryland Ave., all of Baltimore; Cramp & Co. of Philadelphia, Pa. (Recently noted.)

Va.-Tenn., Bristol.—George W. Cater, Johnson City, Tenn., is having plans prepared for theater; 32x39 feet, with wings 55x23 feet; three stories; pressed brick; offices en suite with baths will be provided; contracts will be let soon.

W. Va., Fairmont.—Marshall D. Green of Wellsburg and Claud Belson of Wheeling, W. Va., are planning to erect theater; 60x90 feet; fireproof construction; electrical fixtures; seating capacity 1000.

WAREHOUSES

Ga., Dublin.—C. A. Wines, Lumber City, Ga., will erect sash, door, blind, lumber and building material warehouse.

Ga., Vidalia.—Vidalia Commission Co. will erect brick warehouse; will incorporate with F. O. Powell president and J. D. Todd general manager.

Md., Baltimore. — Owners' Realty Co., Charles W. Hurst, president, 263-269 Calvert Bldg., purchased site 33x60 feet at 4-6 S. Frederick St. and contemplates erecting two four-story semi-fireproof warehouses.

Okla., Oklahoma City.—N. S. Sherman Warehouse Co. will be chartered with $300,000 capital stock by E. S. Sherman, Jr., and associates; to build warehouse; six stories; 140x240 feet; fireproof construction. (See "Foundry and Machine Plants.")

S. C., Anderson.—People's Furniture Co. will erect warehouse; three stories; 30x76 feet; mill construction; cost $4000 to $5000; electric freight elevator; construction by company. (Recently noted.)

S. C., Charleston.—Sea Island Cotton Warehouse Co. incorporated with $5000 capital stock by T. J. Hamlin, William Andell, J. S. Whaley and H. T. Morrison.

Tenn., Nashville.—Jones & Hopkins Manufacturing Co. will erect $10,000 addition to warehouse and foundry at 1st and Monroe Sts.

Tex., San Angelo.—Wool Growers' Central Storage Co. will erect warehouse adjoining present structure at Fort Concho; stone; 50x180 feet; cost about $7000.

Va., Richmond.—J. A. Hatke will erect warehouse; four stories; brick; cost $10,800.

Va., Richmond.—Seaboard Air Line Railway, W. L. Seddon, chief engineer, Portsmouth, Va., will erect one-story brick storage building to cost $2235.

Va., Tenn., Bristol.—A. L. Womack will erect $10,000 brick addition to warehouse.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Md., Baltimore.—Frank H. Cox awarded contract to Park Heights Construction Co., Baltimore, for erection of apartment house at Carlisle and Waldheim Aves.; three stories; 36x70 feet; slate roof; steam heat; cost $19,000; plans by John Forsythe, 232 St. Paul St., Baltimore. (Recently noted.)

Tex., San Antonio.—L. L. Shropshire has plans by and awarded contract to Brown-Lamberts Co., San Antonio, for erection of apartment-house; reinforced concrete; fireproof construction; will award sub-contracts for automatic electric elevators, electric and gas fixtures for lights and fuel, self-regulating steam-heating plant, centrifugal water-cooling system and electrical vacuum dust remover; cost $250,000 to $300,000.

BANK AND OFFICE

D. C., Washington.—Samuel W. Woodward of Woodward & Lathrop, 10th, 11th, F and G Sts., decided to erect office building at 15th and H Sts. N. W., instead of hotel, as recently announced; 11 stories; white marble to beginning third floor; light brick from third to ninth floor; upper stories of terra-cotta; 2 entrances, main entrance to be from H St. side, where six marble Corinthian columns will be built; light court will open on H St., and will begin at second story; structure will contain about 440 offices; first floor for business rooms; interior finish in hardwood and marble; heating plant; five passenger elevators; estimated cost, $1,000,000; site contains about 20,000 square feet, and cost about $600,000 to $700,000; plans by Harding & Upman, 729 15th St. N. W., Washington; contract awarded to T. F. Nesbit & Co. of New York.

Ga., Quitman.—Citizens' Bank and W. W. Walker awarded contract to Baker & Son, Quitman, for erection of bank building; to contain stores and offices; 25x70 feet and 75x100 feet; mill construction; steam heat; electric lighting; cost $20,000; plans by R. B. McGeckin, Macon, Ga. (See "Machinery Wanted.")

Tex., El Campo.—Citizens' State Bank will erect $8000 bank building two stories; 30x65 feet; fireproof and ordinary construction; cost of sidewalks, $150; plans by Hull & Praeger, Victoria, Tex.; contract recently noted awarded to Zuber & Hill, El Campo; office fixtures, etc., not included in contract. (See "Machinery Wanted.")

CHURCHES

Tex., Ennis.—Free Methodist Church awarded contract to C. B. Weaver, Campbell, Tex., to erect concrete edifice. (Recently mentioned.)

Va., Urbanna. — Episcopal congregation, Rev. E. Valentine Jones, rector, awarded all contracts for enlarging edifice recently noted; cost $2000.

CITY AND COUNTY

Okla., El Reno—City Hall and Fire Station. City will expend $36,000 to erect city hall and fire station; 75x125 feet; one, two and three stories; mill construction; brick; steam heat; cost of lighting plant, $800; cost of vault lights and sidewalk, $2000; plans by J. Vogel, El Reno; contract recently noted awarded to Connelly Construction Co., El Reno.

Tex., Plainview—City Hall.—City awarded contract to McRae Building Co., Plainview, for erection of city hall; two stories; brick; cost $10,000.

COURTHOUSES

Ark., Clarendon.—Monroe county awarded contract at $118,000 to W. A. Prather & Co., Memphis, Tenn., for erection of courthouse; plans by Chas. L. Thompson, Little Rock, Ark. (Recently noted.)

DWELLINGS

Ala., Birmingham.—Harry Lyon awarded contract to P. B. Edrington (address care of Mr. Lyon) for erection of dwelling; 32x32 feet; ordinary and mill construction; hot-air heat; cost $3000. (Recently noted.)

D. C., Washington.—Mrs. Wm. F. Downey, 1013 17th St. N. W., through J. Leo Kolb, agent, 923 New York Ave. N. W., Washington, awarded contract to Peter Fersinger, 1 N St. N. W., Washington, for erection of two six-room brick dwellings at 1010-12 4th St. N. W.; cost, $6000.

D. C., Washington.—Charles F. Diggs, Provident Bank Bldg., has plans by and awarded contract to J. J. Moreis for three-story brick store and dwelling at 1457 Corcoran St. N. W.; cost, $4000.

Fla., Tampa.—W. H. Jackson awarded contract to W. R. Page, Tampa, for erection of bungalow; two stories; cost $4000.

Md., Baltimore.—Thos. H. Disney, 2225 E. Pratt St., awarded contract to Wm. F. Welsh, 250 W. Preston St., Baltimore, for erection of 20 dwellings on Robb St., near 20th St.; 14x44 feet; two stories; hot-air heat; tin roofs; cost $1400 each; plans by F. E. Beall, 213 St. Paul St., Baltimore. (Recently noted.)

Md., Ruxton.—John E. Deford awarded contract to John Cowan, 106 W. Madison St., Baltimore, for erection of cottage and stable; two and a half stories; ornamental frame, brick and stone; hardwood and mahogany finish; cost $6000. (Recently noted.)

N. C., Charlotte.—J. L. Staten awarded contract to Blythe & Isenhour, Charlotte, for erection of residence; 10 rooms; brick; marble trimmings; cost $15,000; plans by Hunter & Gordon, Charlotte.

N. C., Wilmington.—Walter Davis awarded contract to W. B. Bevill, 507 Dock St., Wilmington, for erection of dwelling; plans by L. A. H. Koeth, Wilmington.

N. C., Wilmington.—B. Sloan awarded contract to W. B. Bevill, 507 Dock St., Wilmington, for erection of dwelling at Winter Park; plans by L. A. H. Koeth, Wilmington.

N. C., Wilmington.—W. B. Bevill will erect dwelling at Winter Park; plans by Mrs J. C. H. Bevill; construction by owner.

Tex., Galveston.—Tim Sullivan awarded contract for erection of three dwellings; two stories; frame; seven or eight rooms.

Tex., Greenville.—T. C. Foster awarded contract for erection of bungalow.

Tex., Victoria.—Edwin C. Goldman awarded contract to R. Lovejoy, Victoria, for erection of six-room cottage; cost $3800.

Tex., Victoria.—W. H. Smith awarded contract to Henry Schroeder, Victoria, for erection of $4500 residence.

Va., Norfolk.—E. L. Carter awarded contrac to W. H. Mercer, Norfolk, for erection of residence; frame construction; cost, $3500.

Va., Roanoke.—Pace & Markley awarded contract to J. B. Riley, Roanoke, for erection of $4250 dwelling; 40x42 feet; frame; cost of heating plant $550; electric lighting. (Recently noted.)

GOVERNMENT AND STATE

Ky., Bowling Green—Postoffice and Courthouse. — Government awarded contract to Plowman Manufacturing Co., Philadelphia, Pa., at $113,909 for erection of United States postoffice and courthouse; James Knox Taylor, supervising architect, Treasury Department, Washington, D. C. (Recently mentioned.)

HOTELS

Ark., McGehee.—Scott McGehee awarded contract for erection of proposed $40,000 hotel; 40 rooms; three stories; hot and cold baths; pressed brick and stone; will establish laundry in connection.

Miss., Browns Wells, R. F. D. Wesson.—Browns Wells Co., Hazlehurst, Miss., awarded contract to J. F. Barnes, Jackson, Miss., for erection of hotel; two stories; 165x217 feet; ordinary construction; electric lighting; laundry and ice plant may be included; cost $30,000; plans by Thomas Sully, New Orleans, La. For further information address A. L. Covington, Hazelhurst, Miss.

SCHOOLS

Md., Baltimore County.—Baltimore County School Commissioners awarded contract to G. Walter Tovell, Eutaw and Dolphin Sts., Baltimore, Md., for erection of school on Pimlico Rd.; two stories; brick; stone and terra-cotta; granite and copper trimmings; slate roof; reinforced-concrete foundation; 16 classrooms; fireproof; electric lights; steam heat; cost, $60,000; plans by Thomas L. Jones, 410 W. Saratoga St., Baltimore, Md. (Recently noted.)

Okla., Woodward.—City awarded contract at $43,431.50 to George Fletcher of Oklahoma City, Okla., for erection of proposed high-school building.

Tenn., Nashville.—City high school (recently noted) will be erected at cost of $292,000; fireproof building; will be heated by hot air, passing over heated steam pipes; electric lighting; plans by Robt. Sharpe and Wm. B. Ittner, Cole Bldg., Nashville; general contract previously noted awarded to Geo. Moore & Sons, Nashville; contracts for electric work, plumbing, etc., let to Herbrick & Lawrence and East Side Plumbing Co., both of Nashville, and to Johnson Service Co. of Chicago, Ill, and Milwaukee, Wis.; heating and ventilating contracts not yet awarded.

Tenn., Nashville. — Board of Education awarded contract at $230,500 to Geo. Moore & Sons, Nashville, for erection of high-school building instead of at $219,000, as recently noted; also changed construction to Bowling Green stone; 250x180 feet; fireproof; awarded other contracts as follows: Electric wiring at $4119 to Herbrick & Lawrence; plumbing and sewers at $11,700 to East Side Plumbing Co.; heat regulations at $2874 to Johnson Service Co., all of Nashville.

Tenn., Maryville.—City awarded contract at $22,000 to Giffin & Son, Knoxville, Tenn., for erection of two schools.

Tex., Austin.—University of Texas is proceeding with construction of library building; 125x111x55 feet; fireproof construction; low-presure steam heat; electric lighting; stone and brick terrace, 20 feet wide; one ordinary lift and one book lift; cost, $230,000; plans by Cass Gilbert, 11 E. 24th St., New York; contract awarded to James Stewart & Co., Houston, Tex.; building will be completed about June 1. (Previously noted. (See "Machinery Wanted.")

Tex., Center Point.—City awarded contract to Mr. Oppert for erection of proposed $14,000 school.

Tex., Hale Center.—Hale Center School Board awarded contract for erection of $30,000 school; two stories; brick.

Va., Roanoke.—City awarded contract at $74,153 to J. C. Nesbitt, Roanoke, for erection of proposed central grammar school building; heating and plumbing $6000 additional.

STORES

Ala., Birmingham. — Fred Macke awarded contract to Banks & Co., Birmingham, for erection of store building; three stories; brick; cost $15,000.

Ala., Florence. — J. W. Shepard awarded contract to John W. Gray, Florence, for erection of two-story business building; 25x150 feet; cost $6500.

D. C., Washington. — Olive Products Co. awarded contract to Boyle-Robertson Construction Co., Union Trust Bldg., Washington, for erection of store at 229 13th St. S. W.; three stories; brick and concrete; cost $15,000; plans by F. G. Pierson, 1355 Oak St. N. W., Washington.

Ga., Atlanta.—King Realty Co. awarded contract to Gude & Co., Atlanta, for erection of store building; 225x60 feet; mill construction; steam heat; electric lighting; cost $40,000; plans by P. Thornton Marie, Atlanta; will be occupied by King Hardware Co.

Ga., Quitman.—Citizens' Bank and W. W. Walker awarded contract to Baker & Son, Quitman, for erection of store, bank and office building; cost $20,000. (See "Bank and Office Buildings.")

Ga., Rome.—C. R. Porter has plans by and awarded contract to Flave McCurry, Rome, for erection of store building; 25x150 feet; to contain eight stores; fireproof and ordinary construction; electric lighting; cement sidewalks; cost $14,000. (Recently noted.)

Tex., Corpus Christi.—William J. Robertson awarded contract to Gordon-Jones Construction Co. of San Antonio, Tex., for erection of store building; Malakoff tapestry brick; interior finish mahogany; marble bases to show windows; electric elevators; cost $35,000. (Previously noted.)

Tex., Greenville.—C. B. Jones and W. B. Wise will expend $5500 to erect business building; 50x70 feet; ordinary brick construction; electric lighting; concrete sidewalks; plans by George Lindsey, Greenville; contract recently noted awarded to Dickson & Britton, Greenville.

Tex., Teague.—C. W. Gordan awarded contract for erection of business building; 20x100 feet; also extension to adjoining building 20x30 feet.

Tex., Waco. — Frank Keton, S. 3d St., awarded contract to R. B. Carpenter, Waco, for erection of $9000 store building recently noted; 100x84 foot structure; plans by Myall & Bedwell, Waco.

Va., Norfolk.—Twine Bros. awarded contract to W. B. Henley of South Norfolk, Va., for erection of two-story store building; cost, $3000.

THEATERS

Mo., St. Louis.—Middleton Theater Co. awarded contract to Faust & Gray, St. Louis, for remodeling of theater; 25x135 feet;

steam heat; cost, $60,000; plans by Barrett, Haynes & Barrett, St. Louis. (Recently noted.)

WAREHOUSES

Md., Hagerstown.—National Biscuit Co. of New York awarded contract to Roy Lowman of Hagerstown to erect warehouse; three stories; 38x100 feet.

Tenn., Memphis.—Farrell-Calhoun Paint & Wall Paper Co. will erect warehouse; two stories; brick; cost, $6200; Fred D. Young has contract for erection.

Tex., Aransas Pass.—Aransas Pass Channel & Dock Co., E. O. Burton, president, awarded contract to J. P. Nelson, San Antonio, Tex., for construction of warehouse, etc., on Harbor Island channel front; size 200x600 feet. (See "Miscellaneous Construction.")

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Gadsden.—The Gadsden & Birmingham Railroad Co. (Chattanooga Southern), says a report, is advertising for contractors' terms and apparently proposes to start construction near Gadsden soon. C. H. Fisk is chief engineer, 1021 James Bldg., Chattanooga, Tenn.

Ala., Mobile.—A press report says that work will begin soon on the proposed Mobile & Western Railroad, which will enter Mobile by connecting with the Bay Shore Railroad near Mann Station, 12 miles south of Mobile. H. Austell of Mobile may be able to give information.

Ala., Demopolis.—Reported that $16,500 have been subscribed out of a desired total of $20,000 for the proposed Demopolis and Linden railroad. It is expected that construction will begin before spring. Among the reported subscribers are the Robertson Banking Co., Mayer Bros., Demopolis Electric Light & Power Co., Marx Banking Co. and others.

Ala., Selma.—Ernest Lamar is quoted as saying that survey for the Cahaba Valley Railway from Selma to Birmingham has been resumed between Centerville and Bessemer.

Ala., St. Stephens.—An official letter confirms report that the Mobile Portland Cement & Coal Co. will build a railroad. It will be from Prestwick, on the Southern Railway, to the Tombigbee River, 14 miles, via St. Stephens, and to Pelhams Landing, the location of the cement mills, and include seven trestles of wood, 175 to 350 feet long. Construction by company's forces. O. Gerlach is general manager at St. Stephens, Ala.; president, Francis J. Robbins, Pittsburg, Pa.; vice-president, E. L. Russell; treasurer, P. J. Lyons; secretary, R. H. Gentry, all of Mobile, Ala.

Ala., Woodstock.—Rumored that the Louisville & Nashville Railroad Co. has made survey and contemplates building a railroad from Woodstock to a point on the branch to Selma, about 70 miles. W. H. Courtenay is chief engineer at Louisville, Ky.

Ark., Eldorado.—Contracts are reported let for the completion of the railroad which will connect the Shreveport & Northeastern Railroad and the Eldorado & Wesson Railroad. This covers all work between Wesson, Ark., and Homer, La. Reported also that work will begin February 1 from Stuttgart, Ark., toward Memphis, Tenn.

Fla., Titusville.—Wright & Wadley of Macon, Ga., says a report from there, have been awarded contract to build the extension of the Florida East Coast Railway from Maytown, Fla., on the Titusville division, to Lake Okeechobee, 130 miles, with a branch from Whittier, Fla., to Bassenger, 30 miles. The contract covers grading, bridges, trestles and track. Forces have already left Macon for the work.

Fla., Pensacola.—An ordinance is in City Council committee to grant franchise to P. D. Dumont of New York and associates for a railroad from Pensacola to Memphis, Tenn.; also for another line from Pensacola to Andalusia, Ala. Similar franchises were forfeited some time ago.

Fla., Waldo.—Plans are reported under way to build a railroad from Waldo to Melrose, in the eastern part of Alachua county. The Mayor may be able to give information.

Ga., Adel.—An official letter says there has nothing definite been done toward extending the Adel Lumber Co.'s railroad to Pavo, but the matter is under consideration.

Ga., Darien.—The Georgia Coast & Piedmont Railway, it is reported, has completed financial arrangements to build extension from Darien to Brunswick, 18 miles, and also west to Vidalia and Lyons, Ga.; work to start soon. A. de Sola Mendes is vice-president and general manager at Darien, Ga.

Ga., Blakely.—The Blakely Southern Railway Co., says a dispatch, has applied for charter to build a line from Blakely to Jakin to connect with the Atlantic Coast Line. The Mayor of Blakely may give information.

Ga., Rome.—An officer of the Chattanooga Southern Railroad is reported as saying that bids for construction of the line to connect with Atlanta via Rome, Ga., will be asked about April 15. Surveys are in progress. C. H. Fisk is chief engineer, 1021 James Bldg., Chattanooga, Tenn.

Ga., Savannah.—The Seaboard Air Line is reported to have purchased 19 acres of land west of Savannah to add to its yards. W. L. Seddon is chief engineer at Portsmouth, Va.

Ga., Springfield.—The Brinson Railway, says a report, will lay track from Sardis to Waynesboro, Ga., and then make a further extension to Augusta, Ga. George M. Brinson is president, and S. T. Grimshaw, chief engineer, at Springfield, Ga.

Ga., Statesboro.—W. J. Oliver of Knoxville, Tenn., owner of the Savannah, Augusta & Northern Railway, is quoted as saying, after a visit to Savannah, that the line is completed from Statesboro to Midville, Ga., 40 miles, and trains are running from Statesboro to Garfield, but will run through to Midville in about 10 days. Grading is finished beyond Midville to Louisville, Ga., about 15 miles, and as soon as this extension is finished it will be operated.

Ky., Lexington.—The Kentucky Securities Corporation has been organized under a Virginia charter, says an official letter, to provide capital for improving and extending properties of the Lexington & Interurban Railways Co. The latter, it is said, will be liquidated, a majority of shares having approved the financial plan. The new corporation will issue immediately $2,160,240 of 6 per cent. preferred stock out of an authorized issue of $2,500,000, and $2,053,100 of common stock out of an authorized issue of $2,500,000. About $1,000,000 will be provided for the work. I. L. Oppenheimer is general manager of the railways at Lexington, Ky.

Ky., Paducah.—An officer of the Chicago, Burlington & Quincy Railroad writes that it has no definite plans for construction in the vicinity of Paducah. This refers to a report that the company would build in the spring. W. L. Breckinridge is engineer maintenance of way at Chicago, Ill.

Ky., Henderson.—A dispatch says that Jas. Crawford of Terre Haute, Ind., is backing a plan to build a railroad from the south side of the Ohio River opposite Evansville, Ind., to Henderson, Ky.

Ky., Paducah.—W. H. Veach of La Center, Ky., is reported promoting a plan to build a railroad from there to Paducah.

Ky., Shelbyville.—Capt. N. B. Waugh is reported promoting plan to build an electric railway from Shelbyville to Mt. Eden.

La., Athens.—An officer of the Athens & Southeastern Railroad is quoted as saying that track has been laid on eight miles between Athens and Fords, La. Line may be extended seven miles to Arcadia. J. E. Kennedy is general manager at Athens, La., and R. H. Swartz, president, at St. Louis, Mo.

Miss., Columbia.—Rumored that the New Orleans Great Northern Railroad contemplates extending from Columbia to Hattiesburg, Miss., about 30 miles. N. G. Pearsall is manager at Bogalusa, La.

Miss., Norfield.—Official: The Natchez, Columbia & Mobile Railroad Co. proposes to build with company's forces this year a branch to a point near Sartinville, eight miles. Survey in progress. Another proposed line is from near Sartinville to near Montticello, Miss., 12 miles. Survey for the latter also under way. R. B. Butterfield is general manager at Norfield, Miss.

Mo., Kansas City.—The Kansas City Southern Railroad is reported to have sold in New York $5,000,000 of 5 per cent. refunding and improvement bonds, part of the authorized issue of $21,000,000, of which $10,000,000 were sold in 1909. The proceeds of this sale will, it is stated, be used for continuing grade reduction work, purchasing equipment and other betterments. A. P. Rust is engineer of construction at Kansas City, Mo.

Mo., Kansas City.—The Union Depot Bridge & Terminal Railroad Co., it is reported, will build four miles of railroad on its property in Clay county across the Missouri River. It is also said that affiliated interests may build a line 25 miles long to Excelsior Springs. Among those mentioned as concerned are J. Ogden Armour, George B. Robbins and R. J. Dunham. Nothing definite has been done about the line to the Springs.

N. C., Greensboro.—Concerning the report that a railway company was about to be organized in Greensboro to build a road to connect with the Seaboard Air Line, Secretary C. C. McLean of the Chamber of Commerce writes that nothing definite has been done. The matter has been discussed, that is all. The distance would be about 75 miles if built to Mansoa, N. C., as reported.

Okla., Buffalo.—Reported that surveys are being made near Alva for the proposed Buffalo & Northern Oklahoma Railroad, of which E. M. Best of Buffalo, Okla., is president.

Okla., Lawton.—Citizens of Duncan, Okla., are reported to have subscribed funds and to have donated 22 miles of right of way for the proposed railroad from Lawton to Ardmore via Duncan, 125 miles. Philadelphia capital is said to be back of the plan. James H. Wolverton, Judge of Probate at Lawton, Okla., may be able to give information. H. R. Sutton of Philadelphia, H. L. Robertson and J. L. Harmon of Lawton are said to be promoting the road.

Okla., Oklahoma City.—Ex-Governor Chas. N. Haskell, it is reported, contemplates building two railroads, one from Oklahoma City northwest to Woodward, Okla., and the other southwest from Oklahoma City to Bowie, Tex., about 200 miles.

S. C., Greenville.—The Greenville & Knoxville Railway Co. has filed a mortgage, it is reported, to secure bonds at the rate of $40,000 per mile for the extension to be made from Riverview, S. C., toward Knoxville, Tenn. It is generally expected that the line will connect with the Knoxville, Sevierville & Eastern Railway, built by Wm. J. Oliver from Knoxville to Sevierville, Tenn., and which is now extending east from the latter place. The Greenville & Knoxville extension, it is said, will go from Riverview to Brevard, Canton, Asheville and other points in North Carolina, and then into Tennessee. The W. J. Oliver Construction Co. was recently chartered in South Carolina for the purpose, it is believed, of constructing this road. W. H. Patterson of Atlanta is president of the railroad, and R. G. Chestnut, Greenville, S. C., superintendent.

S. C., Mount Holly.—Official: Atlantic Coast Line has awarded contract to H. M. Allport & Son of Richmond, Va., to build new second track from Mount Holly north to Bonneau, S. C., 19 miles. There will be about 6000 cubic yards of concrete for culverts.

Tenn., Greeneville.—The John Heilman Lumber Co., says a dispatch, will build a railroad from a point on the Southern Railway 1½ miles east of Greeneville along Holly's Creek and across the Chuckey River to Doaks Cabin, 10½ miles.

Tenn., Livingston.—An officer of the Cincinnati & Knoxville Railroad Co. which, as reported, may take over the Overton County Railroad and extend it to Somerset, Ky., says there is nothing doing in the matter at present. Further developments may be expected in about six weeks.

Tenn., Memphis.—Walter Goodman, vice-president of the Lakeview Traction Co., says that it now desires to build its proposed lines in Memphis, for which it holds franchise over seven miles of streets. W. W. Hayden is engineer.

Tenn., Nashville.—The Hoover Company of this (Davidson) county is reported to have filed charter with $10,000 capital to build for others railroads, etc. The incorporators are J. T. Hoover, J. S. Clayton, Elmore Hill, J. H. Zarecor and Le Roy McGregor.

Tenn., Nashville.—Survey is reported begun on the Nashville & Gallatin Interurban Electric Railway. H. H. Mayberry of Franklin, Tenn., is president.

Tex., Bryan.—Residents of Bryan are engaged in a movement to build a railroad from Snitana, six miles from Bryan, on the International & Great Northern Railroad, through the Brazos Valley bottom lands for about 20 miles. Subscriptions are being made. Messrs. Saunders, Parker and Butler are mentioned as interested.

Tex., El Paso.—Richard Burgess of El Paso is reported interested in a plan to build an electric railway from Engle, N. M., to Fabens, Tex., on the Rio Grande, about 100 miles.

Tex., Glen Rose.—The Glen Rose & Walnut Springs Railway Co., which some time ago was reported to have let contract, will, it is stated, be completed by June 1 between the two points named, 14 miles, and is expected to be extended later to Fort Worth, Tex., 40 miles. Those interested are J. H. Farr of Glen Rose, Tex.; Milford W. Shuler of Utica, N. Y.; J. M. Goldston of Milford, Tex., and Woodford M. Davis of Dallas, Tex.

Tex., Henrietta.—The Southwestern Railway, it is reported, has applied for permission to issue over $400,000 of bonds to build an extension southwest from Archer City. A. C. Parks is general superintendent at Henrietta, Tex.

Tex., Memphis.—The Altus, Lubbock & Roswell Railroad Co., of which Ed. Kennedy of Houston is president and Edgar Chapman of Lubbock, Tex., secretary, it is reported, has graded about 100 miles of line from Memphis toward Lubbock, the general contractor being the Texas Construction Co. of Kansas City. Line will be altogether 364 miles long.

Tex., San Angelo.—The Kansas City, Mexico & Orient Railway is reported to have let another contract to Roach & Stansell of Memphis, Tenn., this being from Eldorado to Sonora, Tex., 24 miles.

Tex., San Antonio.—The Chamber of Commerce committee on the proposed railroad from San Antonio to the Rio Grande Valley in the vicinity of Brownsville, about 250 miles, is composed of George West, John J. Steves, Alex. H. Halff, Ernest Steves, Otto Koehler, F. L. Hillyer, Charles A. Zilker, Edwin Chamberlain, Henry L. Halff, George C. Vaughan and William Cassin. As soon as the $500,000 subscription list is completed 5 per cent. thereof, or $25,000, must be paid and devoted to promoting the enterprise by securing bonuses and also to make a business investigation of the route. When this is completed a construction company will be formed and work begun. The line is to be standard construction with 70-pound steel rails.

Va., Roanoke.—McGhee & Royer, engineers, says a dispatch, have completed survey to the Blue Ridge for the proposed Roanoke & Mount Airy Railroad, and a good grade has been secured.

Va., Wise.—An official says there is no truth in the report that the Virginia-Kentucky Railway will build between Norton and Wise; it already has a line. It has no extensions planned for this year. This refers to report that it might build into Dickenson county and also along Guest River.

W. Va., Harrisville.—Reported that the property of the proposed Harrisville & Cornwallis Railroad will be sold at auction February 11. Construction was partly done some time ago. Mr. Adams is commissioner of sale.

STREET RAILWAYS

Ala., Montgomery.—The Alabama Traction Co., it is reported, proposes to begin construction immediately on Lee St. J. M. Garrett is engineer and C. G. Abercrombie president.

Ga., Albany.—Application for a street-railway franchise is to be acted upon by the City Council on February 14, and if granted the line, according to a dispatch, will be built by residents of Albany.

Okla., Oklahoma City.—The Oklahoma Railway Co. proposes to increase its capital from $3,000,000 to $15,000,000, so as to be able to issue stock from time to time for extensions and improvements as required.

Tenn., Johnson City.—The Johnson City Traction Co., says a dispatch, has been granted franchise to build the proposed extension of a mile and a half to the Soldiers' Home.

Tenn., Knoxville.—Reported that the Knoxville Railway & Light Co. will double track the Oakwood line from Broadway to the city boundary.

Tex., Austin.—The Austin Street Railway Co., it is reported, will make improvements. Wm. H. Folts is president.

Tex., Fort Worth.—George H. Clifford, manager of the Northern Texas Traction Co., is quoted as saying that the proposed expenditure of $1,000,000 for improvements has been allowed. The work will include an extension to the site of the Texas Christian University and the double tracking of the interurban to Dallas, the work this year being between Fort Worth and Handley.

United States Arc Lamp.

This electric lamp, built for either inside or outside lighting, combines a number of important features which, it is stated by the manufacturers, are seldom seen in one lamp. In power it is extremely economical, and it is claimed that it operates as low as one-sixth of a watt per candle-power, and the light is one under which colors can be matched at night. Geare & Co., 218 E. Lexington St., Baltimore, acts as agent for this lamp and will furnish full information on request.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

Acetylene Plant.—D. R. Pearson, Richmond, Tex., wants prices on acetylene plant for $6000 dwelling.

Air Compressor.—Penick & Ford, Amesville, La., want second-hand flywheel air compressor, to deliver from 400 to 600 cubic feet of air per minute under 100 pounds pressure.

Bank Fixtures.—Farmers' Bank of Olanta, S. C., will purchase bank fixtures.

Blackboard Machinery.—John T. Paris, 181 Second Ave. N., Nashville, Tenn., wants prices on following machinery for blackboards: Machines for moulding crayons from stiff dough made of talcum powder and other ingredients; for mixing and making this dough; cooking flour paste made of wheat or wheat flour; making thick pasteboard slabs, 4 feet wide, 12 feet long and ¼ inch thick, made of strawboard in rolls or wood-pulp board or paper, similar to machines that manufacture matboard of wood-pulp material; also machine for putting enamel or paint on paper and on slabs or pasteboard sheets made by machine No. 4.

Boats.—C. L. Watts, Lineville, Ala., wants to correspond with parties constructing or furnishing plans for constructing gasoline or steam launch or boat for towing logs in water.

Boiler.—John Austrian, 3105 Washington Ave., Newport News, Va., wants prices on 6 to 10 horse-power vertical boiler.

Boiler.—Durham Iron Works, Box 99, Durham, N. C., wants prices on new or second hand 50-horse-power boiler on skids; Cornish preferred.

Boilers.—Columbus Bierce, 15 Lee Bldg., Memphis, Tenn., wants prices on two high-pressure boilers; 66 inches by 18 feet; 150 pounds working pressure; two drums, 40 inches x 10 foot; all connections to main 6-inch steam line; set independent.

Boilers.—Reynoldsville Silica Co., Reynoldsville, Ill., wants prices on new or second-hand battery of two boilers, 150 horse-power each, complete, including fronts, stacks and grates.

Boilers.—Ferriday Hoop Co., J. E. Ormsby, manager, Ferriday, La., will need two 60-inch boilers.

Bottling Machinery. — W. J. Meininger, Rosenberg, Tex., wants names and addresses of manufacturers of bottling machinery.

Brass Castings.—Panchrome Press Manufacturing Co., Corinth, Miss., wants prices from manufacturers of or dealers in light-weight brass castings.

Bricks (Paving).—See "Building Materials."

Bridge Construction.—Greenville County Commissioners, Greenville, S. C., will award contracts February 3 for construction of bridge over Tiger River and bridge over creek at Campbells Mill, in Highland township; plans and specifications made known on day of letting; bidders will be requested to deposit $250, certified check or cash; J. P. Goodwin, supervisor.

Bridge Construction.—Bids will be received at Clerk's office, Monterey, Va., until noon February 9 for construction of bridge 74 feet long in Highland county, near Monterey; bids will be received on both steel and concrete structures; plans and specifications on file in office of State Highway Commission, Richmond, Va., and at Clerk's office, Monterey; certified check, $250; further information on application to P. St. J. Wilson, State Highway Commissioner, Richmond, Va.

Building Materials.—Ernest G. Cook, 1426 Main St., Columbia, S. C., will want prices on building materials and machinery for erection of $16,000 apartment-house containing 54 rooms, including baths and kitchens.

Building Materials.—Southern Building Material Co., Arcade Bldg., Norfolk, Va., wants to correspond with manufacturers of building materials with a view to representation; especially interested in red sidewalk paving bricks.

Building Materials.—Baccich & de Montluzin, 216 Baronne St., New Orleans, La., want prices on hardwood interior finish, tile floors and wall tiling, redwood lumber and shingles.

Building Materials.—D. R. Pearson, Richmond, Tex., wants prices on building materials for $6000 dwelling.

Builders' Supplies, etc.—Little Rock Builders' Exchange, 601 State Bank Bldg., Little Rock, Ark., will receive and file catalogues of interest to manufacturers, architects, engineers, etc.

Canning Machinery.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, Brandsville, Mo., will want prices on canning machinery.

Cars.—Mobile Portland Cement & Coal Co., St. Stephens, Ala., wants prices on one 12-passenger gasoline car and 12 10-yard side-dump cars.

Carbon Paper Machinery.—Board of Trade, Suffolk, Va., wants to correspond with manufacturers of or dealers in machinery to manufacture carbon paper and ribbons.

Church Fixtures. — Building Committee, Methodist Church, Culverton, Ga., wants catalogues and prices on church fixtures.

Castings. — Baltimore (Md.) Board of Awards, care of J. Sewell Thomas, City Register, City Hall, will receive bids until 11 A. M. February 8 for furnishing for use of Electrical Commission manhole frame castings; for specifications and further information address Raleigh C. Thomas, chief engineer, City Hall.

Chemical and Hose Wagon.—City of Columbia, S. C., wants to purchase automobile combination chemical and hose wagon; to carry about 1200 feet of hose and about 40 to 50-gallon chemical tank. G. F. Cooper, Clerk.

Construction Materials.—See "Copper, Cement, Chemicals, etc."

Copper, Cement, Chemicals, etc.—I. Setton & Co., P. O. Box 888, Cairo, Egypt, want to represent manufacturers of copper, cement, chemicals, bar tin, tin plate, foundry products, nails, etc.

Culverts.—Office of County Supervisor, Richland county, Columbia, S. C. Bids are requested for galvanized corrugated culverts in carload lots to be used on the public highways; bids will be received up to 12 noon, February 14; W. F. Muller, Supervisor; W. C. Thomas, Clerk of Board.

Decorating.—See "Painting, etc."

Drum.—See "Engine and Drum."

Dump Cars.—See "Cars."

Electric Light Plant.—See "Water-Works, etc."

Electric Equipment.—D. R. Pearson, Richmond, Tex., wants prices on electric equipment for $6000 dwelling.

Electrical Machinery. — Penick & Ford, Amesville, La., want prices on second-hand direct-connected direct-current 240-250-volt electric generating unit from 75 to 100 kilowatts.

Electrical Machinery.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until 10 A. M. February 7 to furnish at Naval Academy, Annapolis, Md., switchboard. Application for proposals should refer to Schedule 3281. Blank proposals will be furnished upon application to navy pay office, Baltimore, Md., or to bureau; T. J. Cowie, Paymaster-General, U. S. N.

Electrical Machinery.—See "Railway Materials."

Elevators.—Miller Fertilizer Co., 5 9 S. Gay St., Baltimore, Md., will receive bids until February 2 for top elevator with electric hoists, etc., for plant at Canton.

Electric Wiring.—Office Constructing Quartermaster, Fort Sam Houston, Tex. Proposals will be received until 11 A. M. February 11 for electric service connections to seven new buildings at Fort Sam Houston, Tex. Plans and specifications may be seen in office; proposals to be addressed to P. W. Guiney, Constructing Quartermaster.

Electric Wiring.—Proposals are invited until 12 noon February 11 for furnishing f. o. b. cars Speigner, Ala., the following electric supplies and accessories for construction of main underground feeders from hydro-electric power-house to the State Cotton Mill; for furnishing with conduits, accessories, etc., to connect feeder panels at cotton mill with two three-phase motors; furnishing materials for manholes and covers as specified; for furnishing all tools, labor and other materials to do the construction work as specified. State convict bureau will furnish labor required to dig the trenches for underground cables, and will build manholes and do all necessary concrete work. There will be required two cables, each 2200 feet long, composed of three rubber-covered copper wires for conduction of three-phase alternating current at 600 volts, each wire to be 0000 B. & S. gauge, each cable of three wires to be lead-covered and to be of standard manufacture and to meet in every particular requirements of Southeastern Underwriters' Association; each cable to be in five sections, and contractor to furnish all materials for splices. There will be required for cables and for accommodation of one cable not to be placed at this time 6000 feet of bituminized fiber conduit not less than three inches inside diameter; also six three-inch 120-degree elbows to fit above conduit. Detailed specifications for wiring necessary for motors, loricated metal conduits, fittings for cotton mill work and for construction of the underground cables can be secured on application to Edgar B. Kay, engineer, State Convict Bureau, Tuscaloosa, Ala. Plans and specifications governing proposed work can be inspected at office of State Convict Bureau, Montgomery, Ala., or at office of engineer at Tuscaloosa, or assistant engineer at Speigner, Ala.

Enameling Machinery.—See "Blackboard Machinery."

Engine.—Reynoldsville Silica Co., Reynoldsville, Ill., wants prices on 200-horse-power engine; Corliss right-hand preferred; new or second-hand.

Engine and Drum.—Penn Coal Co., Frostburg, Md., wants engine and drum; second-hand preferred.

Engines.—Ferriday Hoop Co., J. E. Ormsby, manager, Ferriday, La., will need 45 horse-power and 65 horsepower engine.

Engine-works Machinery.—Veitch-Matthews Engine Co., Dr. Wm. A. Lovett, fiscal agent, 1203 Empire Bldg., Birmingham, Ala., will want prices on machinery for machine shop and foundry to manufacture turbo-rotary engines.

Fertilizer Mixer.—Purcellville Foundry Co., Purcellville, Va., wants prices and information on machine to mix dry and pulverized ingredients, such as bone meal, nitrate of soda, muriate of potash, etc.

Fertilizer Machinery, etc.—Jefferson Cotton Oil Co., J. C. Miller, manager, Jefferson, S. C., wants information and prices on fertilizer-mixing plant, materials for fertilizer, etc.

Flooring Machinery.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, Brandsville, Mo., wants prices on machinery to manufacture tongue and groove oak flooring and to work up short pieces into chair and table legs, etc.

Flour Mill Machinery.—Southern Milling Co., C. L. Crawford, secretary-treasurer, Ashboro, N. C., will open bids in March for installation of machinery for 100-barrel flour and 150-bushel meal mill.

Foundry Equipment.—See "Engine-works Machinery."

Foundry Products.—See "Copper, Cement, Chemicals, etc."

Gasoline Engine.—D. V. Mauney, Wadesboro, N. C., wants prices on gasoline engine.

Ginning Machinery.—Robert Frohn Sohn, Remscheid, Germany, wants catalogues, prices, terms, etc., on cotton-ginning machinery.

Glass Jars, etc.—H. N. Fitzgerald, secretary Board of Trade, Suffolk, Va., wants names and addresses of manufacturers of glass jars or tumblers for peanut butter.

Gyrascope.—J. Frank Brinkley, Greenville, N. C., wants information, etc., on gyrascope.

Heating Plant.—Baker & Son, Quitman, Ga., want prices on steam-heating plant for 25x70-foot banking-room.

Heating Equipment.—Proposals for installation of steam-heating equipment for Marion county jail, Ocala, Fla., will be received until noon February 7 by clerk Board of County Commissioners; each proposal to be accompanied by certified check of $100; drawings and specifications may be inspected at office of clerk of board at Ocala, also at office of architect, Francis J. Kennard, American National Bank Bldg., Tampa, Fla.; W. J. Crosby, chairman County Commissioners; S. T. Sistrunk, clerk.

Heating Plant.—John O. Moore, Culverton, Ga., wants prices on heating plant for $10,000 dwelling.

Heating Plant.—Baccich & de Montluzin, 216 Baronne St., New Orleans, La., want prices on hot-water heating plant for $6000 dwelling.

Hoisting Equipment.—Zuber & Hill, El Campo, Tex., want to purchase small hoisting outfit; new or second-hand.

Hoop Machinery.—Ferriday Hoop Co., J. E. Ormsby, manager, Ferriday, La., will need complete set of hoop machinery.

Jutine Machine.—J. H. Estes Manufacturing Co., Union City, Ga., wants machine for making jutine from old bagging, sacks, etc.

Labels.—C. B. Tappan, Orange, Tex., wants to correspond with printers of labels for tin cans; Baltimore printers preferred.

Laundry Machinery.—W. J. Meininger, Rosenberg, Tex., wants names and addresses of manufacturers of laundry machinery.

Letter Boxes.—E. J. Ostling & Son, Tuscaloosa, Ala., wants names and addresses of manufacturers of letter boxes to be used on door frame.

Lighting Plant.—John O. Moore, Culverton, Ga., wants prices on gas and electric-lighting system for $10,000 dwelling.

Lock Gate Recess Covers.—Sealed proposals will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. February 27, and then opened, for furnishing lock gate recess covers constructed of structural material, castings, etc.; blanks and general information relating to this circular (No. 629) may be obtained at above office or offices of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco; also from U. S. Engineer Office in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Locomotive.—D. M. McEachern, chairman Board of Commissioners, Wilmington, N. C., will purchase standard-gauge locomotive capable of hauling 200 tons over road with 3 per cent. grade.

Locomotive. — Mobile Portland Cement & Coal Co., O. Gerlach, chief engineer, St. Stephens, Ala., wants prices on 40-ton locomotive.

Lumber. — Joliet Bridge & Iron Co., 378 Randolph Bldg., Memphis, Tenn., in market for carload of long-leaf yellow-pine lumber, all heart.

Machine-shop Equipment.—See "Engine-works Machinery."

Meal Mill Machinery.—See "Flour Mill Machinery."

Metal Caps.—Virginia Metal Roofing Co., 15 Middlebrook Ave., Staunton, Va., wants to correspond with manufacturers of metal caps for bottles.

Metal Working Machinery.—John H. Vaden, Huntington, W. Va., wants prices on machine for folding metal strips on edge of hangers for calendars.

Meters.—Board of Fire and Water Commissioners, City Hall, Kansas City, Mo., will receive bids until 2 P. M. February 9 for design, construction and delivery f. o. b. cars at city water-works station, Quindaro, Kans., of two meters of Venturi type and necessary registering and recording attachments for installation, one on 48-inch pipe line and other on 36-inch pipe line; certified check, $200. For plans and specifications apply to W. Kiersted, chief engineer water department. E. B. Harrington is secretary of Board.

Mixing Machinery.—See "Blackboard Machinery."

Nails. — See "Copper, Cement, Chemicals, etc."

Painting, etc.—John O. Moore, Culverton, Ga., wants prices on painting and decorations for $10,000 dwelling.

Paraffine Machines.—John H. Vaden, Huntington, W. Va., wants prices on paraffine machine for making waterproof paper.

Paving.—Ira J. Anderson, City Clerk, Sapulpa, Okla., will receive bids until 9 A. M. February 4 for construction of 16,000 square yards sheet-asphalt pavement on five-inch concrete base, including grading, curbing, draining, etc.; certified check, $1300; plans may be seen and specifications and blank proposal forms procured at office of City Engineer, E. D. Kirkpatrick.

Paving.—J. B. Winslett, City Secretary, Dallas, Tex., will receive bids until 3 P. M. February 6 for paving Hickory St. from Harwood to Chestnut Sts.; each bidder to bid

separately on following materials: Asphalt macadam, concrete curbs, concrete gutters, combination concrete curb and gutter; certified check, $400; specifications on file in office of City Secretary.

Paving.—Proposals will be received at Bureau of Yards and Docks, Navy Department, Washington, D. C., until 11 A. M. February 11 for paving at Navy-yard, Norfolk, Va. Plans and specifications can be obtained on application to bureau or to commandant of Navy-yard named; R. C. Hollyday, Chief of Bureau.

Paving.—Bob Parman, City Clerk, Oklahoma City, Okla., will receive bids until 5 P. M. February 13 for paving with sheet asphalt, grading, etc., Exchange Ave., from Pennsylvania Ave. to Kentucky Ave.; double driveway, each to be 25 feet wide; 5-inch concrete base, 6x18-inch concrete curb and 3-foot vitrified brick gutter. Mr. Parman will also receive bids until same date for grading Markwell and College Sts., from Cottonwood to Catalpa Ave.; Avenue C, from Higgins to Blackwelder Ave.; Broadway, from Avenue E to Avenue G; Avenue F, from Robinson Ave. to Shield's Boulevard; Columbus Ave., from Avenue E to Avenue G; Shield's Boulevard, from Avenue B to Avenue G, etc.; certified check, 3 per cent. of bid; plans and specifications on file in office of City Clerk; bids will be opened at 10 A. M. February 14.

Pipe Moulds.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, Brandsville, Mo., wants moulds for cement sewer pipe, etc.

Piping.—Sabel Bros., 508 W. Bay St., Jacksonville, Fla., want prices on 1000 feet of 10-inch second-hand cast-iron water pipe.

Plastering.—Cass Gilbert, University of Texas, Austin, Tex., wants bids on plastering for library building.

Plumbing.—John O. Moore, Culverton, Ga., wants prices on plumbing, including bathroom and water system, for $10,000 dwelling.

Portable Crushers.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, Brandsville, Mo., wants portable rock crushers.

Pneumatic Cleaner.—John O. Moore, Culverton, Ga., wants prices on pneumatic cleaner.

Pressing Machinery.—Post van der Burk & Co., Rotterdam, Holland, want to correspond with makers of machinery for pressing ornaments 120x80 millimeters into backs of chairs.

Pulp Machinery.—See "Blackboard Machinery."

Pumps.—See "Water System."

Rails.—Virginia-Carolina Lumber Co., Lynchburg, Va., wants to lease for term of years, with option to buy, seven to eight miles of 40-pound relaying steel rails.

Rails.—Joseph E. Bowen, 901 Bank of Commerce Bldg., Norfolk, Va., wants prices on several miles of 40-pound relaying steel rails with joints; Virginia delivery.

Railway Material.—Miller Fertilizer Co., 19 S. Gay St., Baltimore, Md., will receive bids until February 7 for electric car and necessary tracks for industrial railway at Canton; also on same day for trolley car, trolley wires, wiring, etc.

Road Construction.—Bids will be received at Norfolk County Clerk's office, Portsmouth, Va., until noon February 6 for construction of macadam roadway on Glasgow St. from city of Portsmouth in southwesterly direction, and for extension of macadam roadway on Great Bridge Rd. east of Great Bridge, according to specifications on file in clerk's office; Alvah H. Martin, chairman, Permanent Road Improvement Commission of Norfolk County; P. St. J. Wilson, State Highway Commissioner, Richmond, Va.

Road Machinery.—Sunnyslope Orchard Co., Theodore R. Birkhauer, general manager, Brandsville, Mo., wants road building machinery.

Rod and Angle Reinforcement Material, etc.—Sealed proposals will be received at office of General Purchasing Officer, Isthmian Canal Commission, Washington, D. C., until 10.30 A. M. February 17, and then opened, for furnishing rod and angle reinforcement material for concrete piles, brake-shoe keys and hose; blanks and general information relating to this circular (No. 621) may be obtained from this office or offices of assistant purchasing agents, 24 State St., New York; 55 National Realty Bldg., New Orleans; 1086 North Point St., San Francisco; also from U. S. Engineer Office in Seattle, Los Angeles, Baltimore, Philadelphia, Pittsburg, Boston, Buffalo, Cleveland, Cincinnati, St. Paul, Detroit, Milwaukee, Chicago, St. Louis, Chattanooga, Louisville, Mobile and Galveston; Commercial Club, Kansas City; Chamber of Commerce, Quincy, Ill., and Chamber of Commerce and Board of Trade, Tacoma; F. C. Boggs, Captain, Corps of Engineers, U. S. A., General Purchasing Officer.

Rope.—Penn Coal Co., Frostburg, Md., wants 2000 feet of ⅝ rope.

Safe.—Brunswick county, Virginia, wants to purchase large second-hand fireproof safe; E. B. Lewis, County Treasurer, Meredithville, Va.

Saw Mill.—Ferriday Hoop Co., J. E. Ormsby, manager, Ferriday, La., will need saw mill.

Sewer Construction.—Board of Public Improvements, Room 300 New City Hall, St. Louis, Mo., will receive bids until 12 M. February 3 for construction of Baden public sewer, second section, from end of first section, near Overbeck St., westwardly to Florissant Ave., embracing 4557 feet of reinforced concrete sewer, 14 feet by 11 feet 2¾ inches inside diameter, and 3000 feet of lateral pipe sewer, 8 inches inside diameter, with laterals and appurtenances; deposit required, $4750; plans and specifications on file in office of president Board of Public Improvements; form of bid and other information as to terms and conditions of letting can be obtained at office of Board of Public Improvements.

Soap Manufacturers.—Paris Progressive Club, T. M. Scott, Paris, Tex., wants to correspond with manufacturers of soap.

Stoves and Ranges.—W. C. Smith, Jefferson, Ga., wants names and addresses of manufacturers of asbestos ring or wick kerosene-burning stoves and ranges.

Telephone Equipment.—Blanton Rural Telephone Co., Blanton, Ga., wants price on 9 magneto telephones, 12 miles of No. 12 iron wire, brackets and insulators.

Telephone Equipment.—Baccich & de Montluzin, 216 Baronne St., New Orleans, La., want prices on electrical intercommunicating telephones for dwelling.

Threshing Machine.—D. V. Mauney, Wadesboro, N. C., wants prices on threshing machine.

Tin.—See "Copper, Cement, Chemicals, etc."

Tin Cans.—H. N. Fitzgerald, secretary Board of Trade, Suffolk, Va., wants names and addresses of manufacturers of tins for peanut butter; capacity, 5 to 40 pounds.

Tin Toys.—Virginia Metal Roofing Co., 15 Middlebrook Ave., Staunton, Va., wants names and addresses of manufacturers of tin toys.

Tower.—City of Columbia, S. C., wants to purchase 100-foot tower for fire bell. G. F. Cooper, Clerk.

Vault.—Baltimore (Md.) Board of Awards, care of J. Sewell Thomas, City Register, City Hall, will receive bids until 11 A. M. February 8 for furnishing and erecting vault to be installed on north side of driveway in front of present City Hall Annex, No. 1; certified check, $500; drawings and specifications on file in office of Edward D. Preston, Building Inspector.

Water System.—Baccich & de Montluzin, 216 Baronne St., New Orleans, La., want prices on water system for $6000 dwelling; also electrical force pumps and windmill for water-raising.

Water-works.—City of Doerun, Ga., will receive bids February 15 for construction of water-works; plans not made; cost, $6500. James L. Dowling, Mayor.

Water-works.—Board of Affairs, C. P. Morrison, president, Parkersburg, W. Va., will receive bids until 8 P. M. February 23 for furnishing and installing electric-lighting plant, furnishing and installing system of plumbing and steam heating and for furnishing and erecting steel standpipe in connection with construction of new water-supply system; contracts are designated as contracts Nos. 14, 15 and 16, respectively; general plans and specifications on file at office of consulting engineer, Samuel M. Gray, 930 Banigan Bldg., Providence, R. I., or at office of Water-Works Commission, Union Trust Bldg., Parkersburg; copies of contract and specifications can be obtained at office of Frank Good, City Auditor.

Water-works, etc.—Sealed proposals on blank forms furnished by city and addressed Mayor and Board of Aldermen, Dalton, Ga., will be received until 2 P. M. February 23 for furnishing material, constructing extension to water-works and electric-light system, etc., according to plans and specifications; will need 225 tons 10, 8 and 6-inch cast-iron pipe and seven tons of special castings; 8 fire hydrants, 26 valves and 15 valve boxes; 150-horse-power boiler, 300-horse-power feed-water heater; two turbine pumps with direct-connected induction motors; two compound condensing engines with condensers; two 150-kilowatt A. C. generators with five-panel switchboard; 35 arc regulators; also for laying pipe and taking up old pipe, building reinforced-concrete reservoirs and filter, power-house and pumping station, erecting machinery, furnishing material and doing electrical construction work; bids will be received for whole or part of work; each bid must be accompanied by certified check for not less than 10 per cent. of amount of bid; plans and specifications may be seen at office of engineers or at office of City Clerk; plans may be obtained by making a deposit of $25; usual rights reserved; H. S. Jaudon Engineering Co., Box 582, Savannah, Ga.; W. M. Carroll, City Clerk.

Well-drilling Machinery.—V. G. Anderson, Conway, S. C., wants second-hand deep-well machine for small wells.

Well Drilling.—Great Southern Oil & Mining Co., George C. Sandifer, secretary-treasurer, Paul Jones Bldg., Louisville, Ky., is opening bids for drilling oil wells.

Well Drilling.—De Land Electric Light, Power & Ice Co., De Land, Fla., wants prices on drilling 6-inch well.

Windmills.—See "Water System."

Wire.—See "Telephone Equipment."

Wire.—Office of Chief Signal Officer, Capt. A. S. Cowan, disbursing officer, War Department, Washington, D. C., will receive bids until 1.30 A. M. February 6 for furnishing three miles of wire, field, twin conductor, mountain artillery type, in accordance with Signal Corps specification No. 548. Send for specifications.

Woodworking Machinery.—See "Flooring Machinery."

Woodworking Molder.—Durham Iron Works, Durham, N. C., wants second-hand four-side molder to take eight-inch boards.

INDUSTRIAL NEWS OF INTEREST

Dixon's Flaked Graphite.

During the year 1910 the Joseph Dixon Crucible Co. of Jersey City supplied graphite and graphite lubricants to 210 different railroad companies, and increased its business with them 53 per cent. The company also sold graphite and graphite lubricants to 91 automobile manufacturers, and increased its business with them 260 per cent.

Wants to Represent Manufacturers.

A party in New York with large office force, said to have excellent connections throughout Europe and having thorough acquaintance with the trade in the various European countries, wishes to represent American manufacturers for the European market. For full details address No. 742, care of Manufacturers Record.

Wants Salesman for Rubber Goods.

An established manufacturing company whose products are well and favorably known desires a high-class man to sell mechanical rubber goods in Southern territory. The account offered is one of the oldest and best, and it is desired to engage a man with previous experience and an established trade in the South. For particulars address No. 741, care of Manufacturers Record.

Wants Man to Travel.

An established construction company wants a man to travel and solicit contracts for private and public work. He must have had experience and be in a position to show a successful record. An interest in the business and a good salary is ready for a qualified man. Address No. 739, care Manufacturers Record.

Heany Lamp Co.

This company has secured the services of Harold Kirschberg as expert engineer in illuminants, the association having been effected February 1, at which time his connection with the illuminating department of the Pennsylvania Railroad Co. was severed. The Heany Lamp Co., 1733 Broadway, New York, is associated with the Novelty Incandescent Lamp Co. and the Tipless Lamp Co.

Storage and Transfer Warehouse.

Contract has been awarded by the Fort Scott (Kans.) Grain & Implement Co. for the erection of a large storage and transfer warehouse to be reached by the Frisco lines and the Missouri Pacific Railway system. This company has a contract with the International Harvester Co., Chicago, for storage and transfer of implements moving to the South and West.

Robbins & Myers in St. Louis.

The Manufacturers Record recently announced that the Robbins & Myers Company of Springfield, O., had established an office and warerooms at 112 Pine St., St. Louis. This was incorrect, as the company's St. Louis office and warerooms are located at 1120 Pine St. They are in charge of W. L. Cummiskey, who will carry a complete stock of fans, motors, generators, etc.

Purchase of New Site.

The Drop Forging Co. of New York, with offices in Jersey City, N. J., manufacturer of Spartan chain pipe wrenches and other special drop forgings, has recently purchased from the Bergen foundry the site and buildings located on West Side Ave. and Fisk St., Jersey City. The plant, which has a frontage on West Side Ave. of 308 feet and 210 feet on Fisk St., has been in operation there for over two years.

Orders for Tungsten Lamps.

Important orders for tungsten lamps have recently been secured by the Charlotte Mill Equipment Co. of Charlotte, N. C., through A. L. Milliron. These include orders from the Republic Cotton Mills of Great Falls, S. C., for 60-watt Westinghouse type tungsten lamps, and from the P. H. Haines Knitting Co., P. H. Haines, Jr., treasurer, Winston-Salem, N. C., for 100-watt Westinghouse wire type tungsten lamps.

Foos Manufacturing Co. Changes Name.

The name of the Foos Manufacturing Co. of Springfield, O., manufacturer of scientific grinding machinery, has been changed to the Bauer Bros. Company. This company will continue to manufacture the same products as the Foos company has manufactured heretofore, supplying an extensive trade. Officers of the Bauer Bros. Company are C. S. Bauer, president; L. E. Bauer, vice-president; W. A. Bauer, treasurer, and W. E. Copenhaver, secretary.

Universal Concrete Machinery Co.

The Universal Concrete Machinery Co. of Waterloo, Ia., has recently reorganized and incorporated with a capital stock of $25,000, taking over the old company, which has been established and successfully conducted for 15 years by J. L. Shannon. Mr. Shannon is president of the new company, and his past record is a sufficient guarantee of its standing. O. R. Taylor, the vice-president and treasurer, is favorably known throughout the country, and will give it added strength, while M. L. Cottrill, the secretary, is an experienced office man. The company carries a full line of cement machinery of all kinds and is prepared to fill all orders promptly.

Electric Motors for Cement Plant.

The Westinghouse Electric & Manufacturing Co. of Pittsburg has closed a contract with the Universal Portland Cement Co. for motors to operate the latter company's No. 6 plant at Buffington, Ind. The motors will be of the "MS" mill type, having characteristics specially suitable for cement mill work, and they will operate on a three-phase 25-cycle 440-volt circuit. The sizes range from 5 to 200 horse-power and the aggregate capacity contracted for is 11,500 horse-power. This plant will have a daily capacity of approximately 12,000 barrels, and will be electrically operated throughout. The equipment will be of the latest development for efficient cement mill work.

Southern Building Material Co.

The Southern Building Material Co., Arcade Bldg., Norfolk, is increasing its trade in the sale of building material of all kinds and desires to take up with manufacturers the subject of representation in building materials which it can sell in Virginia and the Carolinas. It desires especially to secure a good account of red sidewalk paving brick. Among the products which the company sells are ornamental terra-cotta, pressed brick; enameled, paving and building brick; fireproof doors and windows, enameled metal, steel lath, hollow tile, steel reinforcing, structural steel, ornamental iron, corner bead, mail chutes, terrazzo, tile and marble, cement, lime, plaster, ornaments, mortar color, roofing tile, slate of all colors, etc.

The Powell Model Star Valve.

The Wm. Powell Company, Cincinnati, is regularly shipping the Powell model star valve on the contract with the Isthmian Canal Commission for all globe and angle valves up to and including four inches, for use in construction work at Panama. No change in construction or the metal formula used was required by the Commission to conform to the specifications, the valve being precisely the same as the company is supplying to all its customers. Powell model star valves have been used by the Government in many of its service branches and have been shipped in varying quantities from a carload, which was sent to

the Philippines, to the smaller quantities ordered for emergency service.

Practicability of "Raydiant" Sidewalk Lights.

That sidewalk lights are practical indoors as well as out is demonstrated by the construction of the new courthouse of Shelby county at Memphis, Tenn., where "Raydiant" sidewalk lights manufactured by the Berger Manufacturing Co. of Canton, O., are in use. These lights were installed largely in the courts of the building, which is one of the largest and handsomest in the South. The cost of the structure was $1,500,000, and it was erected after plans and specifications by Hale & Rogers, architects, New York city. Perfect light is an essential in a county hall of justice, and it was only after a thorough test and demonstration of the light-giving qualities of the "Raydiant" system that the lights were contracted for.

Good Sales of Berger Products.

As indicating the diversified products which the Berger Manufacturing Co. handles through its Atlanta office, in the Rhodes Bldg., as well as a growing Southern demand for its goods, some orders which have recently been secured through this office are significant. These include orders for Berger's ferro-lithic steel centering and reinforcement for the Morocco Temple, Jacksonville, Fla.; Toncan metal roofing for an addition to the plant of the Odorless Refrigerator Co., Chattanooga; sidewalk lights for the Griffin Realty Bldg., Inman Bldg. and Walton Bldg., all in Atlanta; Berger's "Trong Lock" steel frame partition system for the Seminole Hotel, Jacksonville, and the Pierce Bldg., Oklahoma City, and metal ceiling for the Taylorsville (Ga.) Baptist Church, and three floors of the J. N. Smith Bldg., Atlanta. The main office and plant of the Berger Manufacturing Co. are located at Canton, O.

Hydraulic Oil Storage System.

This system of handling gasoline or other volatile oils is so arranged that the gasoline or oil is stored in the tank into which water is supplied under such pressure that the tank is at all times full, thus preventing the oil from evaporating and becoming an explosive mixture. It is claimed that by this method no dirt or water can get in the gasoline that enters the carburettor, as the gasoline is separated from water or other impurities by the storage system; also the chance of explosion is eliminated and evaporation is reduced to a minimum. These advantages should appeal to automobile owners and owners of garages, and to all operators of storage tanks for gasoline or other oils that are lighter than water. Full information regarding the system may be obtained from the Hydraulic Oil Storage Co., 218 E. Lexington St., Baltimore.

C. A. Wood Preserver.

The C. A. Wood Preserver Co., hitherto having general offices at Austin, Tex., now has general offices at St. Louis, increased business throughout the country necessitating a more central location for distributing. This office has been established in the Moore Bldg. at St. Louis, and Harry H. Gerhard is the manager. The Austin office, which will be maintained as the Southwestern branch office, will be located in the Littlefield office building, William H. Gerhard, assistant manager, in charge. Other branch offices will be maintained at 275 La Salle St., Chicago; 135 Broadway, New York; 863 Camp St., New Orleans; 201 Felt Bldg., Salt Lake City, with the Western Electrical Co. in charge of business for the Pacific Coast States. Shipments of the product, which is manufactured in Germany, will be made from New York, New Orleans, Galveston, St. Louis, Denver and Salt Lake City. The United States, Mexico, Cuba and Porto Rico is the territory controlled by the company.

Concrete Feeding Floors and Barnyard Pavements.

The saving principle of feeding floors has been recognized by successful breeders and feeders of live stock, and much thought has been given to their construction. Wooden floors keep the feed out of the mud and dust, saving the grain and at the same time preventing animals from catching wheezing coughs. But in a short time the best wooden floors decay and become infected with disease germs. In concrete it is claimed that farmers and ranchmen have found an ideal floor material, as floors constructed of concrete not only effect a saving in feed, a shortening in the time of fattening and a decrease in labor, but also afford protection to the animal. The Association of American Portland Cement Manufacturers, Land Title Bldg., Philadelphia, is distributing an article entitled "Concrete Feeding Floors and Barnyard Pavements," which presents interesting data regarding the use of concrete for feeding-floor purposes and deals with its advantages, the most approved methods of construction and other features.

A New Baltimore Supply House.

The Codd Tank & Specialty Co., 406 W. Camden St., Baltimore, has been organized with Wm. C. Codd president and J. Early Codd secretary-treasurer, to handle mill, factory and engineer's supplies, and has issued a circular covering the various pamphlets describing its wares. These include the Arrow steam flue blower for the removal of soot; the Codd special babbitt metal, guaranteed to stand 4000 revolutions; the Imperial elevator guide automatic lubricator; the Solaroid and Blackoid sheet packings for steam joints; a good inexpensive vacuum cleaner; conveyor chains and buckets, boilers, engines, stacks, tanks, and the erection of same. The pamphlets also illustrate the Wagener improved single and duplex styles of steam pumps for all purposes, the Maymont self-oiling loose pulley, and the Thermoid rubber specialties. The company manufactures a lubricating compound and Irmena metal polish. It states that the Imperial elevator guide automatic lubricator saves life, time, labor and repairs, automatically spreading grease on elevator guides, and superseding the old and dangerous method of greasing by hand.

The Case Automobile.

At the recent automobile show held at Madison Square Garden the simplicity of the Case car excited much favorable comment. One of the most popular cars of last year was the Pierce-Racine, and the present Case car is identically the same car, the factory of the Pierce company being now under the management of the J. I. Case Threshing Machine Co. of Racine, Wis. Although the Case car is not generally known in the United States, the enormous interest shown in this car and the large number of orders taken at the show have so encouraged the Case company that it believes the Case car will be one of the most popular cars in America in 1911. This car has earned a reputation for simplicity and silence, there being no freakish ideas embodied in its construction. It is extremely light, but very strong and rigid. Through special designs in valve motions silence is obtained in the motor. When the J. I. Case company decided to incorporate the selling of automobiles in its organization it was then one of the oldest engineering firms in America. It endeavored to buy the best automobile factory obtainable and to produce a Case car that would not be equalled by any other builder of automobiles.

Takes Over Road Oiling Machinery.

Acting upon the assumption that roads of the future will be constructed with a binder of asphalt oil or similar material, a view generally held by road engineers and experts, the Good Roads Machinery Co., Kennett Square, Pa., has taken over the road-oiling machinery and devices heretofore manufactured by the G. F. W. Company, Saratoga Springs, N. Y. This equipment will hereafter be manufactured at Groton, N. Y., and will be marketed by the Good Roads Machinery Co. through its branch offices and selling agencies. For the past two years the G. F. W. Company has manufactured the Perfection oil and asphalt distributor, which has received high endorsement from road-building contractors and highway engineers in New York and other States. With this machine it is claimed that heavy oil may be heated and spread upon the road in a smooth, unbroken sheet of any volume required, while the machine will also handle lighter oil that does not require heating. The machine can be operated by one team of horses and one man, and the fuel cost per day, it is said, does not exceed one dollar. The Good Roads Machinery Co. constantly endeavors to broaden its field of usefulness by supplying contractors and road builders with modern appliances for road and street building, and with this aim in view invites inquiries as to its Perfection oil distributor and other machinery.

Arranges New Business Connection.

Edward Blake, Jr., who has been manager of sales for Wells Bros. Company, Greenfield, Mass., for the past four years and a director of the corporation, has severed his connection with the company. Mr. Blake came from the West nine years ago to enter the employ of Wells Bros. Company as a stock clerk. In the stockkeeping departments he acquired a thorough knowledge of the entire line of Little Giant screw-thread cutting tools and machinery, which was of great value in his later work. He was promoted to the order department, and from there went through the various departments to the desk of sales manager and manager of the offices. His work in this capacity was eminently successful, and in 1909 he was elected a director. He has been prominent in the social life of Greenfield, and has held directorships in the Greenfield Club and the Young Men's Club and membership in the Country Club. Mr. Blake has obtained the controlling interest in the Canadian Tap & Die Co., Ltd., Galt, Ont., Can., of which he has been treasurer since its organization in 1905. He leaves within a few weeks to take the active management of the company, and will devote his entire time to promoting its interests. With a wide acquaintance in the machinery and tool trades and among hardware jobbers and others, his many friends, while regretting his departure, will wish him a full measure of success in his new field.

The Quaker City Exhibit.

Annually between Christmas and New Year the J. W. Paxson Company of Philadelphia gives an exhibition of foundry equipment and supplies, presenting the new articles that have been introduced during the year. The company calls this the "Quaker City Exhibit," and expert molders and craftsmen are employed to demonstrate fully the working of each machine. About 300 iron, steel and brass foundrymen have availed themselves of this opportunity this year to keep in line with such new labor-saving machinery as the new Whitehead flask bar tucker, to tuck the sand under and on both sides of the bars at the same time. This is done while in a standing position, and is a great advantage, as every molder realizes. Another simple device was demonstrated to stop the runouts in foundry flasks. A complete Paxson-Warren sand-blast outfit, with the latest improved sand-blast tumbling barrel and air compressor, also tram rail, hoists and overhead cranes, were in evidence. The new Buch hand and foot power, jar ramming, molding machine for bench work and small castings, makes the cope and drag, turns them over and draws the pattern very quickly. The new Barker rock-over molding machine turns over the flask, runs it and draws the pattern automatically. The Paxson-Colliau cupola under construction with the new side inlets to take the blast pipes more readily and the new idea of ironing foundry ladles were noteworthy. New machinery and improved methods were shown in the facing mills, pattern shop, blacksmith and machine shops, also in the wire and bristle brush and bellows factory. The Paxson company has made an early start and now extends an invitation to visit the 1911 exhibition at headquarters in Philadelphia.

TRADE LITERATURE.

The Universal for January.

The January number of Universal, a monthly publication by the Universal Portland Cement Co., general offices, 115 Adams St., Chicago, has been issued. In addition to valuable data relating to the use of Portland cement, the publication also presents a number of interesting illustrations showing structures of various kinds in which Universal Portland cement was used.

Calendars for 1911.

Additional calendars for 1911 have been received by the Manufacturers Record from the following companies: Lutcher & Moore Lumber Co., Orange, Tex.; Lowenthal-Wolf Company, engravers, stationers and printers, Charles and Lombard Sts., Baltimore, and Rogers, Brown & Co., manufacturers of pig-iron and coke, Cincinnati, New York, Chicago, Boston, St. Louis, Birmingham and other cities.

Western Electric Co.

The 1911 Fan Motor Bulletin No. 5352 of the Western Electric Co., 463 West St., New York, is now ready for distribution. It is contained in a stiff cover of bluish gray, with attractive design. This bulletin lists "Hawthorn" fan motors under the following heads: Desk and bracket, oscillating, residence, telephone booth, battery, ceiling and column fan motors, and ventilating outfits. Illustrations and prices are given for each type.

Cement, Gypsum and Lime Directory.

The 1911 Directory of Portland Cement Manufacturers has been issued by the Cement Era, 1207 Morton Bldg., Chicago, Ill. This is the fifth annual edition, and it contains concise, accurate and complete information regarding the various Portland cement plans in the country. There is also added a directory of the manufacturers of gypsum and lime. As a ready reference this book will be found of value to those interested in any of the three industries.

Special Reports on Timber Lands.

As an indication of the complete examinations and reports which they make on timber properties Burton, Read & Co. of Knoxville, Tenn., are sending out in pamphlet form a skeleton description of how this work is undertaken. In addition to showing the quality and quantity of various trees that may be in the tract, other valuable information is also given so that those who may take advantage of this firm's services are in a position to obtain a comprehensive idea of the value of timber lands being investigated.

The Highway Improvement News.

The Tennessee Metal Culvert Co. of Nashville, Tenn., will publish The Highway Improvement News once each month during the present year in the interest of good roads, and will distribute it free of charge to those interested in road work in Tennessee. The first edition of this publication has been issued and contains very interesting notes by many of the leading road workers in the country. It should be of value to road contractors, highway engineers and others interested in good roads and their construction.

Arts-Crafts Lamps.

"Arts-Crafts Lamps," by John D. Adams, is a cloth-bound book of 96 5x7-inch pages. It is published by Popular Mechanics Co., Chicago. This is another of the "written-so-you-can understand-it" books of Popular Mechanics handbook series, and it is illustrated with 16 artistic designs of lamps, with additional structural designs for use in study of the making of these lamps. The descriptive instructions and the dimensioned detail drawings make a very complete little working manual, and besides makes an interesting study in lamps for those not interested in the actual making of them.

Building Progress.

The first number of Building Progress, a new monthly publication devoted to building interests, has been issued by the National Fireproofing Co., Fulton Bldg., Pittsburg. This magazine presents an attractive appearance and contains interesting articles relative to various phases and problems of building construction. Among the subjects treated are "Improved Fireproof Floor Construction in the People's Gas Building, Chicago"; "The Heidelberg Tower"; "Why Architects Choose Terra-Cotta Hollow Tile for Their Own Homes"; "Limiting the Height of City Buildings"; Masonry and Fireproof Buildings" and "Standardization."

Republic Iron & Steel Co.

The 1911 Yearbook of the Republic Iron & Steel Co., Oliver Bldg., Pittsburg, contains 400 pages of description, illustrations and information regarding the products of the company, together with lists of sales offices, the locations of its various furnaces, mines, quarries and factories. Its products are listed in detail, the physical properties tabulated, and 150 pages of diagrams of shapes and sections given. Numerous tables of weights and measures useful in making calculations of estimates are provided; also logarithms and mensuration tables, and a conversion table from metric system to United States system of linear, weight and liquid or dry measures. A complete index is appended.

Catechism on Direct-Current Apparatus.

Under the above title Fairbanks, Morse & Co., Chicago, have published an interesting booklet giving in simple language definitions for electrical terms and describing the construction and uses of different electrical machines. As the title indicates, this treatise is prepared in the form of a series of questions and answers. It was originally prepared for the use of salesmen only, but there has been a considerable demand for it by others. It is illustrated and printed on enameled paper. The insight which it gives to the products of Fairbanks, Morse & Co. makes it interesting to engineers, and to those not familiar with electrical machinery it should be of great assistance. The booklet will be sent on request to interested parties.

Whiting Cranes.

The Whiting Foundry Equipment Co. of Harvey, Ill., a suburb of Chicago, has issued its catalogue No. 82, "Whiting Cranes." This catalogue presents the principal features of construction in standard Whiting cranes, with views of typical installations, naming the plant and service in which used. The various kinds of cranes are described and illustrated under appropriate headings, as electric travelers, locomotive and coal

hoists, transfer cranes, cranes with clamshell buckets, hand-power travelers, locomotive and truck cranes, mono-rail trolleys, jib cranes, pillar cranes, light service jib cranes, portables, etc. A large part of the catalogue is devoted to views of Whiting cranes at work, and a list of some large users of these cranes is given, with the number purchased in each case.

Lime-Burning Plants.

The Improved Equipment Co., 60 Wall St., New York, announces its new line of limekilns and lime-burning equipment in its bulletin No. 4, with a description of the company's various forms of kilns and processes and the advantages claimed for each. The company builds its own outfits, and is prepared to design and install complete lime plants, maintaining for this purpose a corps of expert combustion engineers, whose services are available to all persons having problems of combustion economy. The subjects discussed in the catalogue are the fundamental principles of lime burning and fuels, the Eldred process, the Doherty-Eldred limekilns, the Doherty oil-fired and the producer-fired limekilns, and complete plants for lime production. Several illustrations are included with the appropriate descriptions.

"Northern" Cranes Catalogue.

The Northern Engineering Works catalogue No. 25 illustrates and describes briefly the various classes of cranes made by the company and more fully described in the various bulletins issued. Illustrations of the cranes and working parts are shown in detail, including electric traveling cranes, 1 to 150 tons capacity; the type "E" trolley, from 3 to 75 tons capacity, with detail of gearing; 50-ton type "O" trolley, with special steel frame; double-hook low type cranes, cranes for lifting car bodies, trolley hoists and hand-power traveling cranes; also jib cranes, derrick cranes and electric locomotive cranes. Address the Northern Engineering Works at Detroit, Mich.

Scaife's Range Boilers and Tanks.

The catalogue of the Wm. B. Scaife & Sons Company, Pittsburg, contains prices, dimensions and detail descriptions of the various products of that company, with instructions as to data required in ordering. The subjects include standard galvanized range boilers from 18 gallons to 240 gallons, coil boilers, hot-water and anti-waste expansion tanks, brazier's pressure tanks, air tanks; fire-extinguisher, gasoline, exhaust, pneumatic supply and steel storage tanks, etc. These tanks are brazed where this method is preferable, and welded for ammonia tanks, or riveted for ordinary use. Steel shipping barrels are included in this catalogue, but a special catalogue has been issued covering them more fully.

Troy Dump Wagons and Boxes.

Contractors may largely increase their profits on a season's work if the productiveness of the contractor's plant can be raised and maintained, as in most cases the proportion of profits is to the season's work as the equipment efficiency is to the outfit. Dumping wagons are recognized as being necessary to economically handle and transport many kinds of materials, and the relation between them and net profits is usually such that the dollars of gain are in a direct ratio to the number of good dump wagons required and used. It is claimed that Troy dump wagons make money for their owners by saving time, trouble, repair bills, etc., hence their final cost as well as their purchase price is reasonable, and they give greatest satisfaction in all particulars, the best and longest service. These wagons are manufactured by the Troy Wagon Works Co., Troy, O., and are illustrated and described in a catalogue which the company is distributing. The Troy company also manufactures dump boxes, which are removable or portable for use on ordinary team or farm-wagon gears, and are capable of being converted at reasonable expense into a very satisfactory dumping wagon that will hold sand, gravel, crushed stone, loose earth, cinders, ashes, etc. Troy dump boxes are illustrated and described in a pamphlet which the company has issued.

OBITUARY.

Death of B. M. Root.

The B. M. Root Company of York, Pa., announces the death on January 27 of B. M. Root, its senior member. Mr. Root's active connection with his company extended over a long period, during which it gained prominence in the manufacture of saw benches, plow-handle machinery and other equipment.

FINANCIAL NEWS

Review of the Baltimore Market.

Office MANUFACTURERS RECORD,
Baltimore, Md., February 1.

In the Baltimore stock market during the past week particular interest was shown in United Railways and in Gas & Electric issues, with considerable activity. In the trading United Railways common sold from 17 to 18⅛; do. trust certificates from 17⅛ to 18¼; do. incomes, 62⅛ to 62¾; do. funding 5s, 85¾ to 86, reacting to 85⅛, with last sale at 85¾; do. do. scrip, 86 to 85½; United 4s, 84⅞ to 84⅛; United Car Trust 5s, 1912, 99¾; United Light & Power 4½s, 92 to 92½; Consolidated Gas, Electric Light & Power common, 77 to 71, reacting to 74, with last sale at 73½; do. preferred, 91½ to 91 to 94, with last sale at 93¾; do. 4½s, 85¼ to 85⅜, to 85, to 85¾; do. notes, 99⅛ to 99¼; Consolidated Gas 4½s, 93½; Seaboard Air Line common, 22⅝ to 22½; Seaboard Company common, 24¼ to 24; do. second preferred, 48½ to 48⅜; Seaboard 4s, 87⅛; do. stamped, 87⅜ to 87¼; Seaboard three-year 5s, 100⅛; do. 10-year 5s, 100⅛; do. adjustment 5s, 77⅝; Mt. Vernon-Woodberry Cotton Duck 5s, 74½ to 73⅝ to 74⅛; G.-B.-S. Brewing 4s, 44¼.

Bank stocks sold thus: Exchange, 160 to 160½; Bank of Commerce, 30¾; Mechanics', 28; Merchants', 182 to 181; Farmers and Merchants', 50.

Fidelity & Deposit sold from 158 to 158½; Maryland Trust common, 80; Continental Trust, 204 to 207; United States Fidelity & Guaranty, 158 to 161, with last sale at 159; American Bonding, 78 to 78½; Maryland Casualty, 97½; Baltimore Trust, 164 to 163½.

Other securities were traded in as follows: Alabama Consolidated Coal & Iron 5s, 81; Atlanta Consolidated Street Railway 5s, 105; Jamison Coal & Coke, George's Creek 5s, 91 to 91½; Maryland Electric 5s, 97¼ to 97½; Northern Pacific common, 118¾ to 126⅛; Baltimore City 3½s, 1980, 89 to 89½; do. 4s, 1969, 100½ to 101¼; do. 5s, 1916, W. L., 104; do. 3½s, 1927, 86; do. 3½s, 1928, 94; do. 4s, 1954, 101; Norfolk Railway & Light common, 22; do. 5s, 98½; Northern Central Railway stock, 124½ to 126½ to 125; Baltimore, Sparrows Point & Chesapeake 4½s, 96; Anacostia & Potomac 5s, 100½; do. guaranteed, 102¾ to 103; Carolina Power & Light 5s, 92½; Houston Oil preferred, 47 to 46; Atlantic Coast Line of Connecticut stock, 230; Atlantic Coast Line of South Carolina 4s, 97; Baltimore City Passenger 4½s, 99½; Fairmont Coal 1st 5s, 96½ to 97; Western Maryland 4s, 86⅞; Atlantic Coast Line of Connecticut 5-20s, 91½; Atlantic Coast Line Consolidated 4s, 94 to 94⅜; Consolidation Coal, 102½; Norfolk Street Railway 5s, 107; Western North Carolina 6s, 104¾; Alabama Consolidated Coal & Iron common, 30; Augusta Railway & Electric 5s, 102¼; Baltimore Traction (North Baltimore Division) 5s, 110; Virginia Midland 5th, 106; Fairmont & Clarksburg Traction 5s, 96¾ to 97; Georgia Southern & Florida first preferred, 93; Norfolk & Portsmouth Traction 5s, 82; Carolina Central 4s, 92¾; Florida Southern 4s, 92½; Central Railway extension 5s, 108; Georgia Southern & Florida 5s, 106¾; Baltimore Traction 5s, 107¼; Baltimore Electric 5s, stamped, 88¼ to 88½; Consolidation Coal refunding 4½s, 94; Georgia, Carolina & Northern 5s, 105¾; Atlantic Coast Line convertible debenture 4s, 97 to 97¾; Charleston & Western Carolina 5s, 105¾; Consolidation Coal receipts (25 per cent. paid), 27½; United States Steel, 79¾; Georgia & Florida common, 9½; Atlantic Coast Line of Connecticut 5s, certificates, 104; Baltimore City 3½s, 1940, 93; do. do. 1930, 93½.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended February 1, 1911.

Railroad Stocks.	Par.	Bid.	Asked.
Atlantic Coast of Conn	100	233	235
Charleston Consolidated	50	32	...
Maryland & Pennsylvania	100	20	22
Norfolk Railway & Light	25	22	22⅛
Seaboard Co. Common	100	23¾	24¼
Seaboard Co. 1st Pfd	100	...	85
Seaboard Co. 2d Pfd	100	48¼	48¾
United Rys. & Elec. Co	50	17¾	18
Bank Stocks.			
Citizens'	10	41½	42½
Commercial & Farmers'	100	...	120
Drovers & Mechanics'	100	224	226
Farmers & Merchants'	40	48	50½
First National	100	139	140
German	100	102½	...
Maryland	30	24	26
Exchange	100	160	...
Howard	10	13¼	...
Marine	30	41½	...
Mechanics'	10	28	28½
Old Town	10	12¼	...
Union	100	131	133½
Western	20	37	...
Trust, Fidelity and Casualty Stocks.			
American Bonding	25	...	78½
Baltimore Trust	100	163½	165
Continental Trust	100	206	208
Fidelity & Deposit	50	156½	160
Fidelity Trust	100	212	224
Maryland Trust	100	78	80
Maryland Trust Pfd	100	103	105
Maryland Casualty	25	...	97¾
Mercantile Trust & Deposit	50	143	145
Union Trust	50	...	70
U. S. Fidelity & Guaranty	100	...	153½
Miscellaneous Stocks.			
Ala. Con. Coal & Iron	100	28	37
Ala. Con. Coal & Iron Pfd	100	...	60
Baltimore Brick	100	2¼	2¾
Con. Cotton Duck Common	50	5	6
Con. Cotton Duck Pfd	50	20	21
Con. Gas, Elec. Lt. & P. Com.	100	73	76
Con. Gas, Elec. Lt. & P. Pfd.	100	93	94
Consolidation Coal	100	102	103
G.-B.-S. Brewing Co	100	½	2
Mer. & Miners' Trans. Co	100	77	80
Railroad Bonds.			
Atlanta & Birmingham 4s		86½	...
Atlantic Coast 1st 4s		94	94⅜
Atlantic Coast Conv. Deben. 4s		97¾	98¼
At. Coast (Conn.) 4s, Ctfs., 5-20s.		91½	92½
Atlantic Coast (Conn.) 5s, Ctfs		103	105
Atlantic Coast Line 4s, Ctfs		85	90
Atlantic Coast (S. C.) 4s		...	97½
Atlan. Coast (L. & N. Col. Tr.) 4s.		95½	96
Balto. & Harrisburg 5s		105	...
Balto. & Harrisburg Ext. 5s		104	...
Carolina Central 4s		92½	...
Charleston & West Car. 5s		105¼	106
Coal & Coke Railway 5s		91	...
Col. & Green. 1st 6s		...	107½
Florida Southern 4s		92½	93
Georgia & Alabama 5s		104½	105
Georgia & Florida 5s		...	81
Ga., Car. & North. 1st 5s		105¾	106
Georgia Pacific 1st 6s		113⅝	114½
Georgia South. & Fla. 1st 5s		106½	107
Macon, Dublin & Savannah 5s		98⅜	98⅝
Maryland & Pennsylvania 4s		85	...
Petersburg Class A 5s		107½	...
Petersburg Class B 6s		116	...
Piedmont & Cumberland 1st 5s		99⅞	...
Potomac Valley 1st 5s		107	...
Richmond & Danville 6s		105	...
Savannah, Fla. & Western 5s		...	111¼
Seaboard Air Line 4s		87	87¼
Seaboard 4s, Stamped		87	87¼
Seaboard Adjustment 5s		75	75¾
Seaboard 10-year 5s		100¼	...
Seaboard 3-year 5s		100⅛	...
Seaboard & Roanoke 5s		...	107
South Bound 5s		106½	...
Southern Railway Con. 5s		107	...
Virginia Midland 2d 6s		100	100⅛
Virginia Midland 3d 6s		103	...
Virginia Midland 4th 5s		105	...
Virginia Midland 5th 5s		105	...
Virginia Midland G. M. 5s		107	109
Western Maryland 4s		86⅝	86⅞
Western N. C. Con. 6s		104½	105½
West Va. Central 1st 6s		100⅝	100¾
Wilmington & Weldon 4s		95	100
Wilmington & Weldon 5s		110	...
Street Railway Bonds.			
Anacostia & Potomac 5s		100	101
Anacostia & Potomac 5s, Gtd		102¾	103¼
Atlanta Con. Street Railway 5s		...	105
Augusta Railway & Electric 5s		101½	102½
Balto. City Passenger 5s		100	...
Balto. City Passenger 4½s		99½	...
Balto., Sp. Pt. & C. 4½s		96	...
Balto. Traction 1st 5s		107¼	107½
Balto. Traction (N. B.) 5s		109½	...
Central Railway (Balto.) Con. 5s		107¾	...
Central Railway (Balto.) Ext. 5s		107½	...
Charleston City Railway 5s		102	...
Charleston Con. Electric 5s		95	96
City & Suburban 5s (Balto.)		105¾	106¼
City & Suburban 5s (Wash.)		102½	...
Fairmont & Clarksburg Trac. 5s		96¾	97⅜
Knoxville Traction 5s		103½	104½
Lake Roland Elevated 5s		109½	...
Lexington Railway 1st 5s		83	...
Macon Railway & Light 5s		93½	93½
Maryland Electric Railways 5s		97¼	97½
Memphis Street Railway 5s		97⅛	97½
Newport News & Old Point 5s		90	92½
Norfolk & Portsmouth Trac. 5s		81¼	83
Norfolk Railway & Light 5s		98½	98¾
Norfolk Street Railway 5s		106	108
United Railways 1st 4s		84½	84¾
United Railways Inc. 4s		62¾	62⅞
United Railways Fdg. 5s		85⅝	85¾
Miscellaneous Bonds.			
Ala. Con. Coal & Iron 5s		81	82½
Baltimore Brick 5s		79⅞	81
Baltimore Electric 5s, Stp		88¼	89
Consolidated Gas 5s		108½	109
Consolidated Gas 4½s		94	94
Consolidated Gas 4½s, Cfs		97	97½
Con. Gas, Elec. Lt. & P. 4½s		85½	85¾
Con. Gas, Elec. Lt. & P. Notes		99¼	...
Consolidation Coal Refdg. 4½s		93¾	94
Fairmont Coal 1st 5s		96½	97¼
G.-B.-S. Brewing 1st 4s		43½	44½
Maryland Steel Co. 5s		101	103
Mt. Vernon-Woodb'y Cot. Duck 5s.		74⅛	74¼
United Elec. Lt. & P. 4½s		92½	93

SOUTHERN COTTON-MILL STOCKS.

Quotations Furnished by Hugh MacRae & Co., Wilmington, N. C., for Week Ending January 30.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	72½	...
Aiken Mfg. Co. (S. C.)	...	90
American Spinning Co. (S. C.)	160	165
Anderson Cotton Mills (S. C.)	...	50
Anderson Cot. Mills (S. C.) Pfd.	...	90
Arkwright Mills (S. C.)	100	103
Augusta Factory (Ga.)	50	53
Avondale Mills (Ala.)	116	125
Belton Mills (S. C.)	135	145
Bibb Mfg. Co. (Ga.)	...	114
Brandon Mills (S. C.)	...	100
Cabarrus Cotton Mills (N. C.)	125	140
Chadwick-Hoskins Mfg. Co. (N.C.)	100	...
Chadwick-Hoskins Mfg. Co. (N.C.) Pfd	...	102
Chiquola Mfg. Co. (S. C.)	170	175
Clifton Mfg. Co. (S. C.) Pfd	...	100
Clinton Cotton Mills, S. C.	...	130
Columbus Mfg. Co. (Ga.)	82	85
Courtenay Mfg. Co. (S. C.)	90	100
Dallas Mfg. Co. (Ala.)	98	110
Darlington Mfg. Co. (S. C.)	...	85
Drayton Mfg. Co. (Ala.)	...	100
Eagle & Phenix Mills (Ga.)	110	...
Easley Cotton Mills (S. C.)	...	170
Enoree Mfg. Co. (S. C.)	...	54
Enoree Mfg. Co. (S. C.) Pfd	...	100
Enterprise Mfg. Co. (Ga.)	80	85
Exposition Cotton Mills (Ga.)	195	200
Gaffney Mfg. Co. (S. C.)	71	74
Gainesville Cotton Mills (S. C.)	70	...
Granby Cot. Mills (S. C.) 1st Pfd.	...	35
Graniteville Mfg. Co. (S. C.)	...	150
Greenwood Cotton Mills (S. C.)	58	61
Grendel Mills (S. C.)	100	110
Henrietta Mills (N. C.)	160	175
King, John P. (Ga.)	...	85
Lancaster Cotton Mills (S. C.)	130	...
Lancaster Cot. Mills (S. C.) Pfd.	97	100
Langley Mfg. Co. (S. C.)	...	120
Laurens Cotton Mills (S. C.)	130	136
Limestone Mills (S. C.)	150	170
Lockhart Mills (S. C.)	...	70
Lockhart Mills S. C.) Pfd	...	100
Loray Mills (N. C.) Pfd	95	98
Marlboro Cotton Mills (S. C.)	...	72
Mayo Mills (N. C.)	120	...
Mills Mfg. Co. (S. C.)	...	100
Mills Mfg. Co. (S. C.) Pfd	...	109
Monaghan Mills (S. C.)	100	105
Monarch Cotton Mills (S. C.)	102	110
Newberry Cotton Mills (S. C.)	125	140
Norris Cotton Mills (S. C.)	125	130
Olympia Cot. Mills (S.C.) 1st Pfd.	...	90
Orangeburg Mfg. Co. (S.C.) 1st Pfd.	...	80
Orr Cotton Mills (S. C.)	100	105
Pacolet Mfg. Co. (S. C.) Pfd	...	99
Pacolet Mfg. Co. (S. C.) Pfd	98	100½
Pelzer Mfg. Co. (S. C.)	150	160
Piedmont Mfg. Co. (S. C.)	...	171
Poe Mfg. Co. (S. C.)	...	125
Richland Cot. Mills (S.C.) 1st Pfd.	...	45
Roanoke Mills (N. C.)	153	200
Roanoke Mills (Va.)	153	200
Saxon Mills (S. C.)	127	...
Sibley Mfg. Co. (Ga.)	65	70
Spartan Mills (S. C.)	...	140
Springstein Mills (S. C.)	...	100
Tucapau Mills (S. C.)	300	...
Trion Mfg. Co. (Ga.)	...	127½
Union-Buffalo Mills 1st Pfd	...	61
Victor Mfg. Co. (S. C.)	110	115½
Warren Mfg. Co. (S. C.)	95	100
Warren Mfg. Co. (S. C.) Pfd	100	105
Washington Mills (Va.)	28	...
Washington Mills (Va.) Pfd	106	110
Whitney Mfg. Co. (S. C.)	120	125
Williamston Mills (S. C.)	120	126
Wiscassett Mills (N. C.)	120	135
Woodruff Cotton Mills (S. C.)	110	120
Woodside Cotton Mills (S. C.)	...	98
Woodside Cot. Mills (S. C.) Pfd	...	98½

Quotations Furnished by William S. Glenn, Broker, Spartanburg, S. C., for Week Ending January 30.

	Bid.	Asked.
Abbeville Cotton Mills (S. C.)	...	75
Aiken Mfg. Co. (S. C.)	90	...
American Spinning Co. (S. C.)	160	...
Anderson Cotton Mills (S. C.)	...	48
Anderson Cot. Mills (S. C.) Pfd.	...	100
Arcadia Mills (S. C.)	100	...
Arkwright Cotton Mills (S. C.)	99	103
Augusta Factory (Ga.)	60	65
Avondale Mills (Ala.)	116	...
Belton Mills (S. C.)	132	140
Brandon Mills (S. C.)	99	103
Brogon Mills (S. C.)	...	90
Cannon Mfg. Co. (N. C.)	135	...
Cabarrus Cotton Mills (N. C.)	130	135
Chadwick Mfg. Co. (N. C.) Pfd.	100	...
Chiquola Mfg. Co. (S. C.)	...	180
Clifton Mfg. Co. (S. C.)	...	85
Clinton Cotton Mills (S. C.)	...	120
Columbus Mfg. Co. (Ga.)	93	98
Courtnay Mfg. Co. (S. C.)	...	100
Dallas Mfg. Co. (Ala.)	99	...
Darlington Mfg. Co. (S. C.)	...	80
D. E. Converse Co. (S. C.)	...	100
Drayton Mills (S. C.)	95	105
Eagle & Phenix Mills (Ga.)	117	...
Easley Cotton Mills (S. C.)	165	175
Enoree Mfg. Co. (S. C.)	50	55
Enoree Mfg. Co. (S. C.) Pfd	96	100
Enterprise Mfg. Co. (Ga.)	80	85
Exposition Cotton Mills (Ga.)	...	200
Gaffney Mfg. Co. (S. C.)	70	75
Gainesville Cotton Mills (Ga.)	72	80
Glenwood Cotton Mills (S. C.)	...	150
Gluck Mills (S. C.)	102	106
Granby Cot. Mills (S. C.) 1st Pfd.	35	45
Graniteville Mfg. Co. (S. C.)	155	165
Greenwood Cotton Mills (S. C.)	57	60
Grendel Mills (S. C.)	103	108
Hartsville Cotton Mill (S. C.)	190	...
Henrietta Mills (N. C.)	160	175
Inman Mills (S. C.)	100	108
King Mfg. Co., J. P. (Ga.)	90	93
Lancaster Cotton Mills (S. C.)	130	...
Lancaster Cot. Mills (S. C.) Pfd.	97	100
Langly Mfg. Co. (S. C.)	120	127
Laurens Mills (S. C.)	127	135
Limestone Mills (S. C.)	155	160
Lockhart Mills (S. C.)	...	68
Lockhart Mills (S. C.) Pfd	90	100
Loray Cotton Mills (N. C.) Pfd.	95	97½
Marlboro Cotton Mills (S. C.)	75	80
Mills Mfg. Co. (S. C.)	...	102
Mollohon Mfg. Co. (S. C.)	106	110
Monaghan Mills (S. C.)	104	109
Monarch Cotton Mills (S. C.)	107	...
Newberry Cotton Mills (S. C.)	125	130
Ninety-Six Cotton Mills (S. C.)	140	150
Norris Cotton Mills (S. C.)	121	130
Olympia Cotton Mills (S. C.)	90	...
Orr Cotton Mills (S. C.)	...	102
Pacolet Mfg. Co. (S. C.)	...	90
Pacolet Mfg. Co. (S. C.) Pfd	99	102
Pelzer Mfg. Co. (S. C.)	...	169
Piedmont Mfg. Co. (S. C.)	175	177
Poe Mfg. Co., F. W. (S. C.)	110	125
Saxon Mills (S. C.)	130	...
Sibley Mfg. Co. (Ga.)	71	78
Spartan Mills (S. C.)	125	132
Trion Mfg. Co. (Ga.)	...	130
Tucapau Mills (S. C.)	310	350
Union-Buffalo (S. C.) 1st Pfd	74	80
Union-Buffalo (S. C.) 2d Pfd	...	16
Victor Mfg. Co. (S. C.)	115	120
Warren Mfg. Co. (S. C.)	107	...
Warren Mfg. Co. (S. C.) Pfd	106	110
Washington Mills (Va.)	28	...
Washington Mills (Va.) Pfd	106	110
Whitney Mfg. Co. (S. C.)	110	...
Wiscassett Mills (N. C.)	...	135
Williamston Mills (S. C.)	120	125

[For Additional Financial News, See Pages 92 and 93.]

Established 1835.

The Merchants National Bank

South and Water Sts., BALTIMORE, MD.

DOUGLAS H. THOMAS, President.
WM. INGLE, Vice-Prest. and Cashier.
J. C. WANDS, Asst. Cashier.
JOHN B. H. DUNN, Asst. Cashier.

Capital, $1,500,000
Surplus and Profits - - - $900,000
Deposits, $12,000,000

Accounts of Banks, Bankers, Corporations and Individuals solicited. We invite correspondence.

THE FIRST NATIONAL BANK

OF KEY WEST, FLA.

United States Depository and Disbursing Agent.

Capital - - - - - - $100,000
Surplus and Undivided Profits - $40,000

A general banking business transacted.
Special attention given to collections.

MANUFACTURERS and JOBBERS

Frequently find it necessary to have BANKING FACILITIES in addition to those offered by local banks.

FIRST NATIONAL BANK OF RICHMOND, VA.

With assets of nine million dollars, offers just the additional facilities required.
Jno. B. Purcell, President.
Jno. M. Miller, Jr., Vice-Pres. & Cashier.

INVESTMENT SECURITIES

Southern Stocks and Bonds
Municipal and Corporation
Cotton Mill Stock a Specialty

WM. S. GLENN Broker - SPARTANBURG, S. C.

DELAWARE TRUST CO.

WILMINGTON, DEL.

EDWARD T. CANBY, President.
J. ERNEST SMITH, General Counsel and Vice-President.
HARRY W. DAVIS, Secretary.

Fully Equipped Department for the Organization of Corporations under advice of Counsel, and for the Registration of Corporations as required by the Delaware Law.
Represents over 500 Domestic and Foreign Corporations.
The Delaware Corporation Law is Broad, Liberal, Safe and Stable. Granting and annual taxes low.

H. B. Wilcox, President. Jos. R. Foard, V.-Pres.
Wm. S. Hammond, Cash. Saml. W. Tschudi, A. Cash.
R. E. Bolling, A. Cash. Raymond B. Cox, Auditor.

The First National Bank

17 South St., Baltimore, Md.

Capital - - - - - - $1,000,000
Surplus and Net Profits - - 560,000
Resources - - - - - 9,000,000

Especially well equipped to handle the business of Southern Manufacturers, Corporations and Individuals. We invite a call or correspondence.

1863—48 Years of Success—1911

The National Exchange Bank

OF BALTIMORE, MD.

Hopkins Place, German and Liberty Sts.
Capital, $1,000,000
July 15, 1908, Surplus and Profits, $671,631.60

OFFICERS:

WALDO NEWCOMER, President.
SUMMERFIELD BALDWIN, Vice-Pres.
R. VINTON LANSDALE, Cashier.
C. G. MORGAN, Asst. Cashier.

Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

JOHN NUVEEN & CO.

1st Nat. Bank Bldg., CHICAGO

We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.
Write us if you have bonds for sale.

Hugh MacRae & Co.

BANKERS

MISCELLANEOUS SOUTHERN SECURITIES

COTTON MILL STOCKS

WILMINGTON, N. C.

NEW YORK CITY 149 Broadway

Southern Steam Railroad Securities

DEALT IN

F. J. LISMAN & CO.

Specialists in Steam R. R. Securities
Members New York Stock Exchange,
30 Broad Street NEW YORK
39 Pearl Street, Hartford.
Land Title & Trust Bldg., Philadelphia.

CAPITAL AND SURPLUS - - - - $3,500,000

THE BALTIMORE TRUST CO.

BALTIMORE, MD.

Solicits Accounts of Banks, Bankers, Corporations and Individuals.
Interest Allowed on Deposits Subject to Check.
Special Rates Made on Time Deposits.

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G. C. MORRISON, Second V.-Prest. SAMUEL C. ROWLAND, Third V.-Prest
C. D. FENHAGEN, Secretary-Treasurer

AUDITORS BANKS
INVESTIGATORS COTTON MILLS
SYSTEMATIZERS FACTORIES

All work executed by, or under direct supervision of Certified Public Accountants

INTERSTATE AUDIT COMPANY

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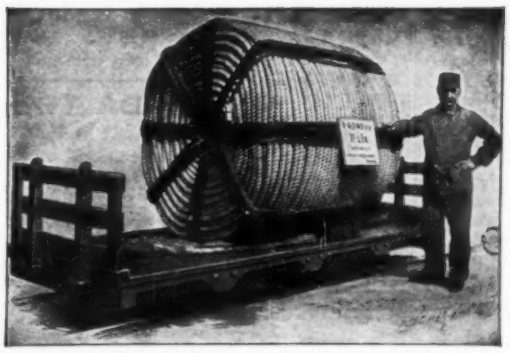

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FINANCIAL CORPORATIONS.

Ala., Clio.—Farmers' Bank of Clio is reported organized with J. N. Stephens, president; Mrs. M. I. Robinson, vice-president; W. M. Reynolds, cashier. Directors are J. N. Stephens, E. W. Norton, A. N. Teal, A. L. McLean and F. N. Stephens.

Ark., Conway.—F. A. Van Deren of Russellville, Ark., and others have, it it reported, applied to the Comptroller of the Currency to organize the First National Bank of Conway with $25,000 paid-up capital.

Ala., Gadsden.—The Etowah Trust and Savings Bank, a new concern, capital $200,000, which is to begin business at 3d and Broadway February 1, has organized by electing J. B. Wadsworth president; J. W. Penn, C. S. Ward, S. S. Caldwell and B. W. Duke vice-presidents; E. W. Whips cashier, R. M. Wilbanks assistant cashier.

Ala., Opp.—A dispatch says that a loan and trust company will be organized in Opp by Messrs. Black, Henderson and Waters of Troy, Ala., who are arranging to start a merchandise business, including live stock.

Ark., Hamburg. — The Farmers' Savings Bank & Trust Co. of Hamburg, capital $50,000, is reported chartered.

Ark., Paragould.—The Bank of Commerce, says a dispatch, will become the National Bank of Commerce of Paragould, capital $100,000, application having been made to the Comptroller of the Currency.

Ark., Texarkana.—The Dixie Life Insurance Co. of Texarkana is reported chartered with $200,000 of capital stock, of which $100,000 is subscribed. Incorporators: W. J. Terrell, president; R. L. Montgomery and Frank Brame, the last two being of Lewisville, Ark.

Ga., Athens.—Official: The Athens Trust & Banking Co. is being organized with $100,000 capital stock. Incorporators: J. W. Griffin of Crawford, Ga.; L. C. Hart, H. J. Rowe, F. A. Lipscomb and R. H. McCrary of Athens, Ga. A general trust and banking business will be conducted.

Ga., Athens.—The Pittard Banking Co., says a dispatch, began business January 18; capital $25,000; surplus $5000.

Ga., Cedartown.—The National Home Fire Insurance Co., recently reported, has, according to a dispatch, organized with the following officers: W. J. Harris, president; Joseph Wheeler and L. S. Ledbetter, vice-presidents; W. S. Coleman, treasurer; Charles Mell, secretary; L. S. Ledbetter, assistant secretary; capital, $100,000; surplus, $50,000. Main office is to be in Atlanta, although organized as of Polk county.

Ga., Macon.—Application is made to incorporate the Bibb Trust Co., capital $1000 to $10,000. A. T. Collins, William C. Miller and F. D. Coburn are the petitioners. Hall & Fowler are attorneys.

Ga., Macon.—The Standard Insurance & Realty Co., capital $25,000, has applied for charter. W. E. Dunwody, Eugene Anderson, E. H. Hyman and J. M. Dunwody are the incorporators.

Ga., Screven.—Official: The Screven Banking Co., chartered recently, began business; capital $25,000. John D. Walker is president; A. C. Colson, first vice-president; Silas Thornton, second vice-president; J. A. Varnedoe, cashier.

Ga., Yatesville. — Official: The Planters' Bank of Yatesville, a new concern, is chartered; capital $25,000; surplus $28,000; will begin business February 1. Directors: L. O. Beuton, Monticello, Ga., president; L. T. Mathews, J. J. Haygood, J. T. Lester, Dr. S. Wilson, E. E. Sewel, Yatesville, Ga.

Ky., Franklinton.—Reported that a new State bank has been organized at Franklinton with $15,000 capital, to begin business March 1. Harvey Jones is president and J. M. Kemper cashier.

La., New Orleans.—The Maas Realty & Investment Co. of New Orleans publishes charter; capital $200,000. Will acquire real estate owned by Jacob Maas & Co., Ltd., and other properties. Directors: Jacob Maas, president; David Bach, vice-president; Eugene Maas, secretary.

Md., Baltimore.—The State Bank of Maryland, at Baltimore city, "opens formally for business April 1, 1911," according to a circular. Capital, $500,000; surplus, $125,000. President, William W. Cloud; vice-president, Summerfield Baldwin; assistant cashier, Walter H. Cook; secretary, G. H. Pfeil. The rest of the staff will be elected later.

Md., Baltimore.—Morris Avenue Building Association incorporated; capital $100,000; incorporators, J. Edward Schleifer, Carroll B. Hoffman, Jr., and Jonathan C. Rogers.

N. C., Durham.—The New South Realty Co. of Durham, capital $10,000; chartered by J. H. Hurst and others.

Okla., Caddo.—Second State Bank of Caddo chartered; capital, $25,000; incorporators, A. U. Thomas, E. C. Million and S. G. Bryan of McAlester, Okla.

Okla., Snyder.—The First National Bank of Snyder has applied for charter; capital $25,000.

S. C., Charleston.—The Southern Home Insurance Co. of Charleston is commissioned. Capital, $150,000, which may be increased to $500,000. Incorporators: W. M. Bird, F. M. Robertson, A. T. Smythe, W. H. Cogswell, O. E. Johnson, all of Charleston.

S. C., Florence.—Official: Farmers' Bank of Olanta, a new concern, incorporated with $10,000 capital; incorporators, S. J. Tomlinson, Olanta, S. C.; R. E. Smith and S. W. Young, both of Lake City, S. C. Not yet organized, but will probably begin business in 60 days.

S. C., Greenville.—Realty Trust Co. granted a commission; capital $100,000; incorporators, W. C. Cleveland, L. D. Spann, J. H. Williams, S. T. Lineberger, Oscar Hodges, E. R. Lucas and W. J. Arnett.

S. C., Heath Springs.—The People's Bank of Heath Springs is chartered. Capital, $25,000. Directors: R. S. Floyd, president; E. F. Horton, vice-president; H. F. Clyburn, cashier; J. G. Richards, L. L. Clyburn, L. R. Rollings, John T. Green and L. Conder. Begins business early in February.

S. C., Jonesville.—The Jonesville Insurance, Loan & Realty Co., capital $10,000, is reported granted a commission; incorporators, F. F. McWhirter, H. T. Hames, A. J. White and D. B. Free.

S. C., Union.—Farmers and Merchants Loan & Trust Co. reported chartered with $25,000 capital; R. P. Morgan, president, secretary and treasurer; L. J. Browning, vice-president.

S. C., Manning.—People's Bank of Manning, capital $25,000, granted a commission; incorporators, John D. Gerald, S. Oliver O'Bryan and A. J. Rigby.

S. C., Manning.—People's Bank & Trust Co. of Manning granted a commission; capital $25,000; incorporators, Charlton Durant, P. E. Graham and E. B. Brown.

S. C., Smoaks.—The Smoaks Banking Co. of Smoaks granted a commission; capital $10,000; incorporators, J. E. Smoak, H. M. Carter, P. W. Thomas and F. J. Berry.

Tenn., Chattanoga.—It is understood that Chas. B. Eddy of New York, president of the Durham Coal & Iron Co. of Chattanooga; C. E. James of the latter city and others interested in the Durham company will organize a trust company with $1,000,000 capital in Chattanooga.

Tenn., Memphis.—Phoenix Trust Co. filed incorporation; capital $50,000; incorporators, J. K. Mills, M. Carter, M. L. Saunders, A. B. Goodwin and Burns Stewart.

Tenn., Nashville.—Official: Fite, Eckhardt & Co., capital $20,000, is a change from partnership to corporation; 306 Third Ave. North, Nashville, Tenn. Incorporators and directors: Robert H. Fite, president; Theo. W. Eckhardt, vice-president; Harry L. Albright, secretary and treasurer; L. H. Davis, H. T. Cotton, T. G. Moore and Louis Cunniff.

Tenn., Nashville.—The Tennessee Farmers' Mutual Fire Insurance Co. has been chartered; A. A. De Long, president; Dr. W. P. Barton, vice-president; H. J. Mullens, secretary; headquarters in Nashville. Among others interested are W. F. Albright of Sumner county, R. H. Cleveland of Smith county, H. D. Beadle of Wilson county, H. J. Mullens of Williamson county, A. W. Jordan of Rutherford county, D. B. Young of Davidson county and others.

Tex., Belton.—A letter from one of the interested parties confirms report that efforts are being made to organize an investment and development company. Announcement to be made soon.

Tex., Brashear.—Farmers and Merchants State Bank chartered; capital $10,000; incorporators, S. D. Greaves, C. M. Potter and W. F. Hull.

Tex., Calvert.—Official: Union State Bank of Calvert chartered to succeed the First National Bank; capital $65,000; began business January 12. Directors: J. A. Foster, president; Tom Field, vice-president; J. H. Adou, cashier; P. C. Gibson, Seth Burnett, W. C. Taylor and B. R. Reid; R. J. Proctor is assistant cashier.

Tex., Coupland.—The State Bank of Coupland, according to a dispatch, represents a change of the Bank of Coupland. C. W. Pfluger is president; A. M. Pfluger, vice-president; H. G. Lehman, cashier.

Tex., Grand Prairie.—Chartered: Citizens' State Bank of Grand Prairie; capital $10,000; incorporators, B. H. Burgher, P. A. Gano and T. H. Hargis.

Tex., Huntington.—Angelina County State Bank of Huntington, chartered; capital $10,000; incorporators, P. S. McKeown, R. B. Forrest and H. H. Wilson.

Tex., Houston.—Official: The Tinker Bank & Trust Co. will incorporate about March 1 with $200,000 capital. H. N. Tinker is president; John W. McGuire, cashier.

Tex., Kenedy.—Official: The Kenedy Loan & Investment Co., a new concern, is incorporated; capital, $25,000 fully paid. Begins business February 1. Those interested include W. T. Courson, L. E. Bain and J. B. Cannon of Kenedy, Tex.; H. S. Jacobi and J. A. Yates of Chicago and Albert Hontman of New York.

Tex., Lockhart.—Chartered: The Flowers-McDowell Abstract Co. E. B. Coopwood is president, the others interested being George W. Baker, George W. Walton, M. O. Flowers and Joseph McDowell.

Tex., Malone.—First State Bank of Malone reported organized. Capital, $15,000. Directors: President, S. Q. Pierce; cashier, T. Stockton; G. O. Goode, August Kelley and J. H. Rogers.

Tex., Queen City.—Guaranty State Bank of Queen City, capital $15,000, chartered; incorporators, H. S. Rogers, Dr. J. C. Strawn and J. E. Ellington and others.

Tex., Sadler.—First Guaranty State Bank of Sadler has filed charter; capital $10,000; incorporators, J. D. Rodgers, H. C. McMahon, J. A. Hayes and others.

Tex., Wichita Falls.—The Wichita Southern Life Insurance Co., it is reported, has secured enough subscriptions to insure its being organized March 14; proposed capital, $300,000; surplus $300,000. J. A. Kemp, president of the Wichita Falls & Northwestern Railway, is mentioned for president.

Tex., Yantis.—Official: Yantis State Bank of Yantis chartered; capital $20,000. Will begin business as soon as practicable. W. R. D. Willett, president; J. H. Craver, vice president; John A. Craver, cashier; W. M. Craddock, assistant cashier.

Tex., Waco.—The Farmers and Merchants' State Bank of Waco is the name of the new financial institution being organized by L. Fouts of Dayton, Tex., and others; capital $100,000. Charter will be secured immediately. Begins business March 1. Associated with Mr. Fouts are W. W. Latsinger of Center, Tex.; M. L. Garrett, J. C. Holloman and George Bird of Waco.

Va., Gate City.—The Farmers' Protective Insurance Co. of Scott County has been incorporated; mutual concern; W. D. Gardner, president, Bruno, Va.; O. M. Smith, secretary and treasurer, and A. T. Henderson, both of Gate City, complete the incorporators.

Va., Richmond.—Official: Kentucky Securities Corporation organized to provide capital to improve and extend the Lexington & Interurban Railways, Lexington, Ky. Authorized capital stock, $2,500,000 of preferred 6 per cent. shares, of which $2,160,240 is to be issued immediately, and $2,500,000 of common shares, of which $2,053,100 is to be issued immediately. Directors: Caldwell Hardy of Norfolk, Va.; J. A. McCarthy, Howard A. Loeb and Percy M. Chandler of Philadelphia, Pa.; Gustavus W. Cook of Lansdowne, Pa., and T. B. Gay of Richmond, Va. (See "Railroad Construction.")

W. Va., Harrisville.—W. E. Lowther is reported organizing the Mountain State Insurance Co. of Harrisville.

NEW SECURITIES.

Ala., Bessemer.—Official notice is given that an election will be held February 27 to vote on $75,000 of 5 per cent. 20-year bonds to fund the floating debt; denomination $500.

Ark., Conway. — Official: Report is confirmed that $68,000 of 6 per cent. water-works bonds dated January 1, 1911, and maturing in 11 years have been sold to the Southern Trust Co. of Little Rock, Ark. G. W. A. Wilson is official in charge.

Ala., Mobile.—The $117,000 of street-improvement bonds sold to the Equitable Life Assurance Society of New York city at par and accrued interest were 5 per cents.

Ala., Seale.—Bids will be received until noon February 13 by the Commissioners' Court of Russell County for $100,000 of road and $20,000 of public-building 5 per cent. 30-year bonds; dated March 1, 1911. H. T. Benton is Judge of Probate.

Ala., Thomasville.—Reported that $8000 of 5 per cent. 20-year school-building bonds may again be offered for sale.

Ark., Jonesboro.—Official: Report confirmed that Clyde A. Walb of Lagrange, Ind., purchased $24,000 of drainage bonds, 6 per cent.; denomination, $500 each. Dated August 1 last. Mature 1-15 annually. W. A. Maywood is County Judge.

Fla., Pensacola.—Official: Report is confirmed that the Provident Savings Bank & Trust Co. of Cincinnati, O., purchased the $250,000 of 4½ per cent. Pensacola improvement bonds dated January 1 for $240,627. There will be $100,000 for sewers and water and $150,000 for paving.

Ga., Adel.—The $7500 of 5 per cent. 30-year water-works bonds offered December 31 are reported sold to the J. B. McCrary Company of Atlanta at par.

Ga., Doerun.—Official: The $6500 of water-works bonds recently voted have been sold

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Ga., Forsyth.—Reported that an election may be held to vote on a proposed issue of $50,000 of road-improvement bonds.

Ga., Rome.—Bids will be received, it is reported, until noon March 1 for 4 per cent. bonds thus: $75,000 water-works improvement, $50,000 sewer, $50,000 street paving and $25,000 of school; dated April 1, 1911. The remaining $75,000 of school bonds are not offered now; denomination $1000. S. J. Powers is chairman of the finance committee.

Ga., Rome.—The city is reported to have purchased $5000 of its own 4 per cent. bonds for the sinking fund at par.

La., Hammond.—It is contemplated to issue $100,000 of bonds for schoolhouses, sewers, etc.

Md., Easton.—Reported that $8000 of 4 per cent. Talbot county bridge-construction bonds may again be offered for sale.

Miss., Mendenhall.—Official: $40,000 of road bonds are to be sold. J. F. Thames is clerk.

Miss., Starkville.—Official: Bids will be received until noon February 6 for $20,000 of 5 per cent. road-improvement bonds of District No. 1, Oktibbeha county, dated October 3, 1910. Denomination, $500. Bonds mature $2000 each year from 1921 to 1930, inclusive. A. A. Montgomery is president of the board, care Chancery Clerk, Starkville, Miss.

Mo., Charleston.—Bids will be received until noon February 6, it is reported, for $28,000 of 6 per cent. bonds of drainage district No. 25; denomination $1000. A. R. Boone is County Treasurer.

Mo., Chaffee.—The $26,000 of 5 per cent. water-works and city-hall bonds, for which bids were received January 18, are reported being offered by Farson, Son & Co. of Chicago; denomination $1000.

Mo., St. Louis.—The Mayor is reported to have recommended that an election be held soon after the regular municipal election (which occurs April 4) to vote on a proposed issue of $2,250,000 of bonds to complete the municipal free bridge.

Mo., Warrenton.—Reported that $10,000 of water bonds are being offered for sale.

N. C., Asheville.—The city will ask the Legislature for authority to issue $50,000 of school-building improvement bonds. It is also proposed to issue $482,000 of bonds to refund loans maturing next July. (This item erroneously appeared last week as of Nashville, N. C.)

N. C., Chadbourn.—$30,000 of 6 per cent. 3-12-year canal-construction bonds of Chadbourn drainage district are reported taken by the Brett Engineering Co. for contractor for the work.

N. C., Wilson.—Reported that $36,500 of 6 per cent. bonds of Lyon Swamp Drainage District have been sold to the Brett Construction Co. of Wilson, and $8500 remain to be disposed of.

Okla., Britton.—It is stated that George I. Gilbert of Oklahoma City was the purchaser at par and interest of the $45,000 of 6 per cent. schoolhouse-construction bonds issued by Britton school district; denomination $500.

Okla., Chandler.—Bids will be received until February 6, says a dispatch, for $900,000 of Deep Fork drainage bonds by the Commissioners of this (Lincoln) county.

Okla., Haskell. — $25,000 of water-works bonds are reported to have been voted.

Okla., Kiowa.—R. A. Reese of Muskogee, Okla., is reported to have bought at par $18,000 of 6 per cent. 25-year water and light bonds.

Okla., Red Rock.—Bonds to erect a city jail are reported voted, according to a telegram.

Okla., Snyder. — An election is reported called for February 7 to vote on $25,000 of light-extension and $15,000 of water-extension bonds.

S. C., Manning.—$5000 of refunding bonds recently voted are reported sold.

S. C., Spartanburg.—According to a dispatch, the City Council decided to ask the Legislature to order an election in Spartanburg to vote on $200,000 of bonds, of which $40,000 are desired for a city hall, $50,000 for streets and sewers, $9000 for fire department, $11,000 for refunding a bond issue maturing next July and $90,000 to fund the floating debt.

S. C, Sumter.—Bids will be received until noon March 7 for $10,000 of 4½ per cent. 20-year Sumter county road-improvement bonds; denomination $1000. J. R. Sumter is clerk to County Commissioners.

Tenn., Chattanooga.—$2940 of Walnut St. paving bonds are reported sold at par and interest to the First National Bank of Cleveland, O.

Tenn., Cookeville.—The election proposed for February 25 is reported for $100,000 of 4 per cent. 30-year turnpike bonds.

Tenn., Germantown.—It is proposed to ask the Legislature for authority to issue $3000 of bonds for lighting and paving.

Tenn., Jellico.—$90,000 of 6 per cent. 20-30-year water and sewer bonds are reported offered for sale.

Tenn., Johnson City.—A dispatch says that an ordinance is passed to issue $40,000 of 5½ per cent. refunding bonds.

Tenn., Johnson City.—A letter says that bonds will be issued for water-works extension, authority having been given. They may be sold soon. Last year $375,000 were voted.

Tenn., Knoxville.—The county high school board, it is reported, will apply to the Legislature for authority to issue $25,000 of bonds to pay off the debt resulting from the purchase of the Central High School property at Fountain City.

Tenn., Memphis.—It is contemplated by the County Board of Education, says a report, to apply to the Legislature for authority to issue from $200,000 to $250,000 of bonds, of which $50,000 is to fund floating debt, and the rest is for improvements.

Tenn., Rogersville.—Official: Bids will be received until 1 P. M. February 2 for $20,000 of 5 per cent. Hawkins county bridge warrants dated January 2, 1911, and maturing in from one to ten years at the rate of $2000 each year; denomination, $250, $500 and $1000 each. J. R. Sanders is secretary, Rogersville, Tenn.

Tex., Aransas Pass.—Official: $25,000 of 5 per cent. 10-40-year water-works bonds have been voted. Dated December 15, 1910. Also $20,000 of 5 per cent. street bonds, 40-year, but option to be arranged when sold. Both issues will be offered for sale in either February or early in March.

Tex., Austin.—The Attorney-General has approved bonds thus: $30,000 of 5 per cent. 10-40 Beeville school; $8000 of 5 per cent. 20-40 Brookshire school; $9000 of 5 per cent. 10-20 Uvalde school; $20,000 of 5 per cent. 40-year Aransas Pass school; $1000 of 5 per cent. 20-year Johnson county, District 5, school.

Tex., Beaumont.—$75,000 of 5 per cent. 20-40-year road bonds of Jefferson county are reported sold to Walter A. Myrick at par and accrued interest; denomination $1000. A dispatch says that they will be taken by Spitzer & Co. of Toledo, O.

Tex., Calvert.—The Mayor, says a dispatch, has been authorized by the Council to order a special election on $25,000 of city improvement bonds.

Tex., Conroe.—$25,000 of 5 per cent. 10-40-year school building bonds voted October 19 have been registered.

Tex., Dallas.—The Attorney-General, says a dispatch, has declared invalid 12 bridge-repair bonds of Dallas county, total $15,000, upon the ground that they were not first approved by qualified taxpayers.

Tex., Farwell.—$12,000 of 5 per cent. 20-40-year bonds of Parmer county Schood District No. 5 are reported sold at par and interest to Carter & Cox of Amarillo, Tex. Denomination, $1000.

Tex., Gainesville.—According to a dispatch, the $150,000 of 5 per cent. 40-year water-plant purchase bonds have been sold to E. P. Blanton of Gainesville at par. A previous report said they were taken by the Thos. J. Bolger Company of Chicago.

Tex., Georgetown.—Reported that petitions will be presented to the Commissioners' Court requesting an election for $100,000 of road bonds in Justice Precinct No. 4.

Tex., Groveton.—$13,000 of 5 per cent. 10-40-year bonds of School District No. 12, Trinity county, are reported registered.

Tex., Groesbeck.—$3000 of 5 per cent. 20-year bonds of School District No. 11 of this (Limestone) county are reported sold.

Tex., Iredell.—$7000 of 5 per cent. 10-40-year Iredell school bonds are reported sold.

Tex., Lampasas.—A movement is under way to issue bonds of Lampasas county to build a bridge over the Lampasas River at Waco Road.

Tex., Mexia.—Reported approved: $20,000 of street and sidewalk bonds.

Tex., Mount Pleasant.—Election called for February 20 on $8000 of school-building bonds.

Tex., Palestine.—$17,000 of public park and $9000 of fire equipment 5 per cent. 10-40-year bonds are reported sold at par and interest.

Tex., Palestine.—$2500 of 5 per cent. 10-20-year bonds of School District No. 21, Anderson county, are reported sold at par to the Anderson county permanent school fund. Dated September 1, 1910; denomination, $500.

Tex., Petty.—Reported that Petty school district will be organized and issue school-building bonds.

Tex., San Saba.—Reported registered: $11,300 of 5 per cent. 10-30-year bonds, dated August 10 last, of San Saba County Road Distict No. 1.

Tex., Shafter Lake.—Official: Date is to be set to sell $8000 of 5 per cent. 20-year courthouse bonds of Andrews county, dated February 13, 1911; denomination, $400 each. N. P. Ross is County Judge.

Tex., Silverton.—A dispatch reports that $25,900 of schoolhouse bonds have been voted by District 1 of Briscoe county.

Tex., Teague. — Farmers and Merchants' State Bank of Teague is reported to have bought the balance of $6000 city water-works bonds at par.

Tex., Vernon.—$9000 of water-works-extension and $3000 of sewer-extension 5 per cent. 10-40-year bonds are reported sold at par to Sutherlin & Co. of Kansas City.

Tex., Winfield.—Reported that it is contemplated to call an election on $8000 of school-building bonds.

Tex., Ysleta.—The proposed issue of $18,000 of school-building bonds was defeated, it is reported, by an almost unanimous vote.

Va., Cape Charles.—Bids will be received until 7 P. M. February 6 for $20,000 of 5 per cent. 5-20-year school bonds; dated March 15, 1911; denomination $500. I. J. Burrage is Clerk; John T. Daniel is Mayor.

Va., Farmville.—Official: Report is confirmed that bids were called for January 31 on $15,000 of 5 per cent. 10-20-year sewer bonds; dated January 2; denomination $500. H. E. Barrow is chairman of the finance committee.

Va., Jonesville.—A dispatch says that $364,000 of 5 per cent. Lee county road bonds have been sold at par to Seasongood & Mayer of Cincinnati, O.

Va., South Boston.—$3500 of 6 per cent. bonds are reported sold at 100.25 to local investors.

Va., Marion.—$6500 of 5 per cent. water-improvement bonds are reported to have been recently sold at par and interest to investors. This leaves $5000 as the unsold balance of the total issue of $12,000.

Va., Martinsville.—$35,000 of 6 per cent. 34-year electric-light bonds are reported sold at 100.75 to Woodin, McNear & Moore of Chicago.

Va., Norfolk.—The Board of Aldermen is reported to have authorized an issue of $320,000 of 4½ per cent. bonds to refund a 5 per cent. loan of equal amount.

W. Va., Williamson.—Seasongood & Mayer, Cincinnati, O., are reported to have been awarded at 101.53 and accrued interest $40,000 of 5 per cent. 10-20-year courthouse-improvement bonds of Mingo county.

At Scale, Ala., bids will be received until noon February 13 for $100,000 of road and $20,000 of public building 5 per cent. 30-year bonds of Russell county. *Further particulars will be found in the advertising columns.*

FINANCIAL NOTES.

The United States Fidelity & Guaranty Co. of Baltimore has recently established two new branches—one at Memphis, Tenn., and the other at New Orleans, La.

A press dispatch from Sherman, Tex., reports the consolidation of the Commercial National and the Continental State banks under the name of the Commercial State Bank. W. R. Brents is president.

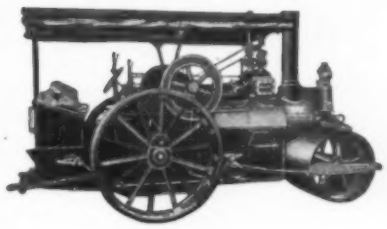
The Davenport State Bank, according to a press report from Davenport, Okla., has been purchased by a syndicate headed by J. W. Orr of Tulsa, Okla., and he becomes president.

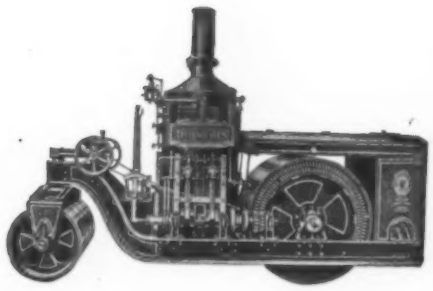
The Southern Trust Co. of Little Rock, Ark., is reported to have absorbed the Center St. Savings Bank, which had $25,000 capital, $6200 surplus and $1200 undivided profits, with deposits of $35,000. J. O. Johnston, president, it is said, becomes a director in the trust company, of which W. M. Kavanaugh is president.

The Bank of Luverne, Ala., says a dispatch, now represents the consolidation of the Merchants and Planters' Bank and the Bank of Luverne; capital, surplus and profits between $90,000 and $100,000; W. E. Holloway is president; T. W. Shows and W. B. Howard, Sr., vice-presidents; M. W. Rushton, cashier; J. T. Ivey, J. C. Weldon and G. E. Turner, assistant cashiers.

THE IROQUOIS IRON WORKS

STEAM ROLLERS





THE AMERICAN STANDARD

FIFTEEN YEARS EXPERIENCE

BUFFALO, N. Y.

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Rate 20 cents per line per insertion. Minimum space accepted, four lines. Maximum space accepted, 24 lines. Allow seven words per line. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year, as follows: 100 lines, 18c. per line; 300 lines 16c. per line; 500 lines or more, 15c. per line.

AGENCIES WANTED

PARTY in New York with large office force, having excellent connections throughout Europe and being thoroughly acquainted with the trade in the various European countries, wishes to represent American manufacturers for the European market; good chance for manufacturers who want to build up a large European business. Address No. 742, care Manufacturers Record.

WANTED—Sales agency for all lines pertaining to builders' material; East Tennessee as territory; can furnish satisfactory references to interested concern. Address Daniel Briscoe, Jr., Knoxville, Tenn.

HAVING established sales agency, we can market any product; give highest references; let us figure with you. Address Penn Bros., Box 340, Montgomery, Ala.

AGENTS AND SALESMEN WANTED

WANTED—A gentleman to travel and solicit contracts for private and public work. He must have had experience in obtaining contracts and be in a position to show successful record in that line. Interest in business and good salary for qualified man. This position is with large established construction company. No amateurs need apply. Address No. 739, care Manufacturers Record

WANTED—Real salesmen acquainted with building and contract work to handle concrete mixers. The American is a batch mixer giving a perfect mix either wet or dry. It is sold under a liberal commission arrangement without requiring any financial investment by the agent. A good seller in other sections and should prove attractive in the South with pushing. Address Cargill Mfg. Co., 567 Buttles Ave., Columbus, Ohio.

WE WANT a high-class man to sell mechanical rubber goods in the Southern territory. Only those having had previous experience in the territory and have an established trade need apply. The account offered is one of the oldest and best in the business, whose goods are well and favorably known throughout the South and elsewhere. Address, giving references, experiences and compensation required, No. 741, care Manufacturers Record.

SOUTHERN AGENCY.—Wanted—Agent for Southern territory by a corporation manufacturing structural and railroad paints and specialties; high-grade proposition, on commission basis, with exclusive territory and considerable trade already established, to right party Address No. 731, care Manufacturers Record.

MANAGERS WANTED

MANAGERS WANTED for several woodworking and machine and metal-working plants; must be of proven ability and in position to take small amount of stock. McAlester Commercial Club, McAlester, Okla.

WANTED—Man to assume general management of up-to-date coffin and casket factory; requirements, a good record and from $3000 to $5000 in cash. Virginia Coffin & Casket Co., Inc., Norton, Va.

UNUSUAL OPPORTUNITY.—Manager wanted to take charge of factory end of largest plant in the South manufacturing sash, doors, blinds, interior finish and hardwood work. The right man must be able to take some stock so as to be interested in business. Woodward Lumber Co., Atlanta, Ga.

COMMERCIAL SECRETARY WANTED

COMMERCIAL SECRETARY WANTED.—Man of experience, not over 40, good address; salary and references first letter. Stuttgart Club, Stuttgart, Ark.

HELP WANTED

WANTED—At once, shop foreman for woodworking plant; prefer selling small interest in the business; no reference required; ability will show for itself. Address No. 743, care Manufacturers Record.

WANTED—CARPENTERS AND MACHINISTS.—One first-class high-grade man as foreman of cabinet and frame department; must have unquestionable references and able to lay out stair work.

Two apprentices for above department not under 18 years of age; must write good hands and be good in mathematics.

One, first-class machinist with experience in sash, door and planing mill, capable of making bits, filing saws, handling moulders and matchers, a combination man.

Apply in own handwriting, giving references, stating wages required and when could begin. Chas. B. Harman, Manager, Gainesville, Fla.

SITUATIONS WANTED

WANTED—To invest several hundred dollars with a corporation where there is a position attached; young man highly educated; prefer a manufacturer or some technical firm. Baxter Genoble, Bethune, S. C.

SALES MANAGER and organizer, with long experience as executive head, who is an electrical and mechanical engineer of ability, desires position with concern of standing where results and aggressiveness will be the basis of his worth. Address No. 740, care Manufacturers Record.

CIVIL ENGINEER, 15 years' experience, covering difficult U. S. Government survey work, general concrete construction and municipal work, including street paving, design and construction of sewerage systems; good executive ability and can handle any kind of construction work; best of references, among them consulting engineers of note. Address No. 734, care Manufacturers Record.

EDUCATIONAL

RENSSELAER POLYTECHNIC INSTITUTE, TROY, N. Y.—Courses in Civil, Mechanical and Electrical engineering, and General Science, leading to the degrees of Civil Engineer (C.E.), Mechanical Engineer (M.E.), Electrical Engineer (E.E.), and Bachelor of Science (B.S.). Special courses in engineering and science. Splendidly equipped new engineering laboratories. Send for catalogues to Registrar.

BANKS

THE CITIZENS' BANK OF NORFOLK, Va., capital $300,000, surplus $375,000, solicits accounts of banks, firms, corporations and individuals.

COMMERCIAL STATE BANK, Birmingham, Ala. State depository. Prompt attention to Alabama collections.

THE PALMETTO NATIONAL BANK, Columbia, S. C., capital $250,000, solicits accounts of banks, firms, corporations and individuals, either commercial or savings accounts.

ACCOUNTANTS AND AUDITORS

SHELDON AUDIT COMPANY, certified public accountants and auditors, Candler Building, Atlanta, Ga. Audits, systems, examinations. Highest testimonials. Reasonable charges. Correspondence solicited.

BUSINESS OPPORTUNITIES

WANTED—Party to invest $20,000 and assist in active management of a 50-ton ice factory with coal and wood business in connection; plant located in a Southern rapidly-growing railroad center of 10,000, is in a prosperous condition and paying 20 per cent. on investment. Opportunity for enlargement is ripe, but principal owner cannot undertake additional work on account of advancing years. Will pay salary adequate to ability. Unless you mean business and have money and are competent for active assistance don't reply. Knowledge of this particular business is not requisite. Address No. 719, care Manufacturers Record.

ARE YOU INTERESTED in ice-making or cold storage? Send 10 cents for a sample copy of "Ice," a high-class technical and news journal devoted exclusively to ice making and refrigeration. Address "Ice," Byrd Building, Atlanta, Ga.

FOR SALE—A-1 wooden-bowl plant; everything new; plenty of room and power for manufacturing other articles; strong negotiations for getting natural gas soon. Address R. L. Edwards, Columbus, Miss.

FOR SALE—Lumber mill, equipped with modern woodworking machinery (practically new), ideally located on the N. & W. Ry. in Norfolk, Va. We have a good trade in retail lumber and millwork. Our yards and sheds, covering 18 city lots, are well stocked with lumber. Will sell all or a controlling interest. Reason for selling, party leaving the city. For further particulars address Box 185, Norfolk, Va.

MR. WHOLESALE GROCERMAN OR GRAIN DEALER, we have one of the choice corners of this city for rent; the best opportunity for a wholesale grocer or a grain and hay business. We have recently landed 7 factories, and we have the most prosperous city in the Southwest. For particulars address G. Less & Co., Texarkana, Texas.

I HAVE about 10,000 acres of fertile black loam agricultural land in Southern Louisiana to drain and market, which will yield an approximate profit of 800 per cent., and am open to proposition from men with capital. Address No. 735, care Manufacturers Record.

WE BUY everything in old scrap material and pay highest market prices; no quantity too large or too small. H. Kander & Co., Bowling Green, Ohio.

FOR SALE—Whole or half interest in old-established, well-advertised retail business in the growing city of Greenville, South Carolina. For particulars address No. 738, care Manufacturers Record.

EXCEPTIONAL OPPORTUNITY. — FOR SALE—One-quarter interest in 5000 acres of accessible hardwood timber in Western North Carolina can be secured for $25,000; now being profitably operated by practical men owning balance interest. Principals only need apply, with references. Address No. 727, care Manufacturers Record.

SAWMILL, TIMBER AND RAILROAD FOR SALE.—Modern sawmill in operation, daily capacity 75,000 feet; 23,000 acres long-leaf yellow pine timber that will yield 100,000,000 feet of lumber; 28 miles of chartered railroad with trunk-line connection; for sale account of death of one of the partners. For full particulars, map, etc., address P. O. Box 234, Bainbridge, Ga.

FOR SALE OR EXCHANGE—Controlling stock in a prosperous manufacturing business which carries with it position as manager. For further information address F. G. Gauntt, Fort Wayne, Indiana.

STOVE FOUNDRY FOR SALE.—Well-established stove foundry in Georgia, in order to increase output, will sell ten thousand dollars additional stock at par; located in thriving city, convenient to iron, coke and coal, with best railroad facilities and competitive rates; will sell controlling interest to capable foundryman who will take active charge of foundry at good salary. Also want two traveling salesmen to invest $2000 each and travel at good salary. Correspondence and investigation solicited. On account of other business the owners cannot give their personal attention. This is a good opportunity for capable parties to secure controlling interest and employment in good business. Address Box 213, Dalton, Ga.

WANTED—Party to patent and manufacture extension table I have just invented. Write for full particulars to No. 736, care Manufacturers Record.

FOR SALE—Grocery, feed, coal, coke and wood business in a city of 5000 inhabitants, with only three coal dealers; doing a business of $10,000 a year; located in one of the finest cities in Michigan, with the best of schools, etc. Parties meaning business, for further particulars, write McMillen & Son, Mt. Pleasant, Mich.

SEWAGE DISPOSAL

SEWAGE DISPOSAL.—The Annular System House Sewage Disposal is adapted to private residences, hotels, schools, courthouses and jails. The patronage of small towns and communities is especially solicited. Write us. Annular Sewage Disposal Co., 453 Hood Building, Birmingham, Ala.

TYPEWRITERS

TYPEWRITER BARGAINS. — All makes, ¼ to ½ price. Remingtons, $10 up. Smith Premiers, $18 up. Oliver, like new, $34. Get catalogue and list. Minnesota Typewriter Exch., Minneapolis, Minn.

ENTERPRISE EXCHANGE, INC., 609 E. Baltimore St., Baltimore, Md.; remanufactured typewriters, all makes; three days' examination allowed; catalogue upon request; full line of ribbons, carbons and papers.

MONEY WANTED

CAN USE $50,000 for five or ten years at 5 per cent.; will give first mortgage on farm property at 40 per cent. valuation. B. E. Norvell, Bay City, Texas.

MINING EXPERT wants financial backing for a mining proposition that will yield millions if worked practically; no danger of loss. L. Sherard, Evergreen, Ala.

LOCATIONS

PRESIDENT of Business Men's Association desires to correspond with manufacturers wanting better location in the South. Near raw material, market, cheap fuel; thriving, up-to-date city, having all the requirements and advantages for economic manufacturing; financial aid given to meet expanding business requirements; free sites; four railroads and water transportation; information free. Address President 701, 115 Dearborn St., Chicago.

WHY PALMETTO LEADS. — The 800,000 boxes of fruits and early vegetables attests the superiority of soil, climate and irrigation necessary to produce such crops. The ease with which such crops are handled by rail and water make it an ideal place for fruit and vegetable growing. The Manatee River, Terra Ciea and Tampa bays furnish ideal salt-water fishing, boating and bathing. For further information address The Manatee River Board of Trade, Palmetto, Florida.

INDUSTRIAL. — The Gulf Lake Railway traverses the choice section of South Georgia; offers rare opportunity to home seekers; liberal concessions to parties desiring locations for factories and other industries. For particulars address J. H. Hillhouse, Vice-Pres., Sylvester, Ga.

FROSTBURG, MARYLAND, in the heart of the famous George's Creek Coal Field, is a city of opportunities; natural gas, cheap coal, abundance of fine water, healthful climate, finest quality of clay for fire and red brick, modern schools; large supply of female help for silk mill, shirt and overall factories; wonderful opportunity for farming, fruit culture and stock raising, with an active market at home. Splendid railroad facilities and excellent trolley service. Address Board of Trade.

FACTORY SITES

FOR SALE — MANUFACTURING SITE, BIRMINGHAM, ALABAMA.—I offer for sale a manufacturing site of five acres, with good buildings and exceptional facilities in the way of railroad sidings, etc.; right in the heart of Birmingham's largest suburb, within the limits of Birmingham; especially attractive to large users of pig-iron and steel. Present owners and occupants are winding up their business here and this site is offered at a bargain. Jerome Tucker, Birmingham, Ala., 207 21st St. Phone 379.

INDUSTRIES WANTED

WOODWORKING PLANTS

BAY CITY, TEXAS, wants a woodworking plant located there; has unlimited supply of good cottonwood and willow for excelsior, etc., which are extensively used throughout for wagons and implements of all kinds, and the best of elm for barrel hoops; has three trunk lines of railway, good churches and schools, and is the center of the rice industry of Texas. If interested, address Ten Thousand Club, Bay City, Texas.

FURNITURE FACTORY

PROXIMITY to unlimited high-grade timber and an unsurpassed market make successful manufacture certain in McAlester, Oklahoma, where many additional woodworking plants will find an ideal location; free site and other liberal assistance. Call on or write the Commercial Club, and they will prove it.

MISCELLANEOUS

ALEXANDRIA, LOUISIANA, situated in the geographical center of the State, with seven railroads and a navigable river, surrounded by magnificent forests of native woods, and in the heart of a splendid agricultural section, offers an ideal location for manufacturing industries. Correspondence solicited. Address Secretary Alexandria Progressive League

VICTORIA, TEXAS, head of navigation of Guadalupe River; center of cotton, corn, truck and citrus fruit-growing district of South Texas; country rapidly developing; opportunities for many industries. If interested in the coastal section of Texas, write for booklet "D" to the Secretary of the Progressive League.

SAN ANTONIO, TEXAS, with her splendid facilities and ideal climate, is after many other industries, which will receive very substantial encouragement. The Real Estate Exchange will cheerfully furnish information for benefit of industries seeking new locations. Population 96,614. Cheap fuel and labor. Artesian water in abundance. Address J. C. Rice, Secretary, San Antonio, Texas.

PAWHUSKA, OKLAHOMA, will donate free sites and furnish free commercial gas for a period of five years to manufacturing enterprises of merit. Write Secretary Chamber of Commerce.

OPPORTUNITY now knocks at your door. The industrial and commercial needs of Texas are great. Let us tell you about them and assist you in locating in the State with a vast future. Wholesale houses and distributors, furniture, brick and cotton manufacturers, ice plants and hotels—these are a few of the thousand opportunities. One million dollars a day of new wealth is coming into Texas to develop the vast empire. Get some of the good things for yourself. We are the clearing-house for all the commercial and industrial information concerning Texas, and we will gladly put our knowledge at your service. Texas Commercial Secretaries' Association, Fort Worth, Texas.

HILLSBORO, TEXAS, is the county seat of Hill county, 65 miles south of Dallas, 55 miles east of Fort Worth, 35 miles north of Waco. Hill county raises the second to third largest cotton crop of any county in the South. Hillsboro wants a gas factory, a garment factory, an interurban street-car line. Franchise will be granted to right party. Now have three railroads located; two mail lines. For further information write A. L. Blanchard Secy., Hillsboro, Tex.

COME TO ASHLAND, KY.—Best paved city in U. S.; on Ohio and Big Sandy rivers; five railroads. Ashland wants farmers and fruit growers, wholesale establishments, manufacturers; also pig-iron, steel, black and galvanized sheets, nails, wire products, leather, lumber, fire-brick, red brick and cement block manufactured here. Cheap coal and natural gas. Write Ashland Business Men's Association, Ashland, Ky.